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CROTALUS AS A REMEDY.

(Continued from p. 236, Nos. 6 & 7).

Crotalus, Lachesis and Cobra have each produced both diarrhoea and constipation in the human subject. In some instances diarrhoea, in some constipation, has been the primary effect, probably according to the dose. We should think material doses produce diarrhoea, infinitesimal doses constipation, as a primary effect. As in the case of most other drugs, diarrhoea and constipation alternate with the repetition of the same doses; and one effect may follow the other on the discontinuance of the drug. None of these venoms has produced dysentery in man. Crotalus has produced dysentery in the dog. Crotalus has produced *involuntary* evacuation of dark bilious character. Involuntary stool is not recorded either under Lachesis or Cobra. It seems to be a characteristic of Cobra that both the desire to evacuate the bowels as well as the evacuation that follows are *always sudden*. Lachesis has also sudden diarrhoea, but it has more often delayed stool.

As the effect of constipation the stools are described as hard in all the three venoms, being nodular only in Lachesis. In Lachesis the stool is felt to be in the rectum as far down as the anus, but it does not pass, nor is there any urging to evacuate it.

In Lachesis, notwithstanding constipation (no stool) for ~~long~~ a time as seven days, there is no impairment of the appetite. The constipation of Lachesis is somewhat relieved by smoking which causes some scanty and pasty stool to pass. The evacuations of constipation are passed with distress in both Cobra and Lachesis, in the latter with such "pains as if the sphincter would be forcibly pressed asunder." In Lachesis the secretion of urine becomes suppressed along with constipation, there being in one case, as a secondary effect of the bite, "neither stool nor urine for seven days." In Crotalus the bladder sympathises with the rectum, in this wise, that there is involuntary evacuation of urine along with involuntary stool.

The diarrhoeic stools in all the three venoms are of all degrees of consistency from pasty to watery. In Crotalus the diarrhoea is attended with excessive thirst and repeated attacks of vomiting, not so stated under either Lachesis or Cobra. All the three have bilious diarrhoea. In Crotalus and Lachesis the diarrhoeic stools are attended with violent colic, in Cobra with gripping pains. The stools of Lachesis are described as excessively offensive, of intolerable odor, a characteristic not found in Crotalus and Cobra. Acids, even fruit, easily cause diarrhoea after Lachesis. The provings of Crotalus and Cobra do not seem to have been directed to establish this fact. Under Lachesis undigested stools have been found to improve, a fact that has not been observed under Cobra and Crotalus. Mucus has not been observed to be passed under Cobra, very rarely it is passed under Lachesis, and then it is so acrid that it is painfully discharged from the rectum, with voluntary pressure. Crotalus, as we have said above, has produced regular dysentery in the dog, the characteristic of the dysentery would seem to be abundance of both mucus and blood, instead of being scanty, and the blood having no power to coagulate. In Lachesis blood is discharged while pressing *after* a copious evacuation. In Lachesis there is burning during and after stool, not so mentioned under Crotalus and Cobra. Lachesis has a full catalogue of symptoms referring to the rectum and anus, such as hæmorrhoidal troubles, prolapsus of the rectum after stool, spasmodic constriction of the anus, symptoms which are wanting in Crotalus and Cobra, probably from the incompleteness of their provings.

Under *Crotalus*, as has been observed by Dr. Hayward, "urination is at first frequent and the urine copious, afterwards seldom and scanty; the urine becomes dark and of a high specific gravity, albuminous, bloody; and sometimes copious hemorrhage occurs, hæmaturia and albuminuria are indeed very constant effects." As observed in the dog there is acute congestion of, and hemorrhage in the substance of the kidneys from *Crotalus* poisoning. In one instance, "a long, thin clot was found in the left ureter, and bloody urine in the bladder." Hæmaturia has not been observed under *Lachesis* and *Cobra*, and it is impossible to say whether the urine was at all albuminous under their action. The "dark and frothy urine" of *Lachesis* might or might not have been albuminous. Dr. Pope, while proving *Cobra*, found his urine thickly loaded with lithate and mucus, the presence of lithates in the urine constitutes an important symptom of *Cobra*. If there had been albumen, an acute observer like Dr. Pope would have noticed it. The red sediment in the urine of *Lachesis* probably points to the presence of lithates.

While we have the remarkable systems of the action of *Crotalus* on the kidneys we have scarce any indication of its action on the bladder and the urethra. The only symptom reported is strangury associated with vomiting, and tenesmus in the rectum. Whether this is due to want of action of the venom on the bladder and the urethra, or to want of adequate and sufficient provings to elicit that action, it is not possible to say. Contrasted with this dearth of vesical and urethral symptoms of *Crotalus*, we have quite an abundance of the same in *Lachesis*. Thus, constant pressure in the region of the bladder and in the urethra, with frequent need to urinate, is a predominant symptom. There is burning in the urethra during, with a milk-white gleet-like discharge after, micturition. There are constant cutting and sticking, and a sort of sore pain, in the fore part of the urethra. There is urging to urinate, but inability to do so, except at long intervals, and there is also dribbling micturition. One, who had taken the 30th dilution of the drug, is reported to have had a return of his old urinary troubles while riding in a wagon (after drinking wine), which disappeared immediately after *Nux*, taken while riding. Under *Cobra* we have no other symptom referrible to the bladder than uneasiness and pressure in it.

*Crotalus* is thus likely to be useful in nephritis, acute or chronic, when hæmorrhage from the renal capillaries is a predominant symptom, and the effused blood is fluid and dark. In this respect *Crotalus* is an analogue of Phosphorus, the effusion of bright red blood from the kidneys being the characteristic of *Cantharis* and *Terebinthina*. Dr. Hayward has given the following cases from his own practice:—*Hæmaturia*.—Mr. S—, aged 58, the subject of asthma and with weak heart. After a chill had bronchitis, with extremely scanty urine, which was dark red with blood. Bel. 3 checked the bronchitis, but had no effect on the character of the urine. On the third day *Crt.* 6 was exhibited, every two hours. Marked improvement followed in the condition of the heart; and the urine became free from blood within three days. Mr. H—, aged 54, a similar case, but less inflammatory. Nux 3 improved the chest symptoms in three days, but had little or no effect on the character of the urine; *Crt.* 6 was now exhibited, every two hours; and the urine was free from blood within three days. Mr. L—, aged 18, generally of good health, had to work for some days in wet clothes; had an attack of lumbago with very scanty urine loaded with lithates. Under rhs. and ars., the lumbago passed off in three days, and the urine increased in quantity and became dark red with blood. Under *Crt.* 6 all traces of blood disappeared in four days. C. G —, aged 6. His brother had passed through mild scarlatina without much treatment. He had slight feverishness but no eruption; after some days his face became swollen, and puffed under the eyes; his abdomen large; and his urine smoky, and afterwards black, and under the microscope it proved to be loaded with dark ill-formed blood discs. *Crt.* 6 was ordered every two hours; and under it the urine became clear and all dropsical symptoms disappeared within a week. Curious to relate; after another exposure to scarlatina, after about six months, this boy went through a rather severe and well-marked attack of the disease; and was treated with *Crt.* 6. The urine became milky, but not bloody; and was soon put right with pho. 3.

*(To be continued)*

## GERMICIDES.

BY A. MITRA, L.R.C.P., L.R.C.S.

The Germ theory of diseases, which was considered a few years ago only as a medical fad or fashion, has now assumed a serious position in pathology. It has modified the method of treatment of many important diseases, and has in fact shaped the therapeutic weapon of defence of many a physician and surgeon. It is not my business in this paper to examine a theory as to the truth of which the scientific and medical world is by no means agreed, and which is supported and contested by equally strong men. Granting a faith in the theory I am concerned only with its practical applications. Some of my readers perhaps use carbolic acid as an antiseptic. Iodoform and Eucalyptus are used by some in tuberculosis, and sulphocarbolates and sulphites are used in septic diseases. These drugs are used in the hope of killing the germs; it is proper therefore to examine how far they are competent to serve this end. Disinfectants and antiseptics are, however, sometimes used to disturb an organic compound which nourishes germs and ferments. Koch, the great German bacteriologist, has published in the reports of the Imperial Board of Health for 1881, the results of experiments which he carefully conducted with the view of establishing the real value of disinfectants. His experiments were mostly conducted upon the spores of *anthrax bacilli*. The result is thus summarized by Amidon:—

“Koch has found that solutions of carbolic acid in oil or alcohol are absolutely inert in respect to their action on bacteric life, either on the spores or bacilli. He took solutions of one and five per cent. of carbolic acid in oil, and also pure oil itself, and tested them with the anthrax bacilli and other micro-organisms, and found that bacteric life was arrested in the pure oil at the end of six days. The same took place in each of the carbolized solutions.” Koch admits the germicidal value of phenol in aqueous solution in certain per centages. Delacroix says that ten per cent. of carbolic acid is required to destroy bacteric life. Koch's conclusions are fully confirmed by Wolfhügel.

With such facts before us we can easily see why many surgeons are disappointed with the results of Listerism, for it appears that 1 or 2 per cent. aqueous solution and carbolic oil are powerless to arrest bacterial life, specially in its *Dauerform* or spore state.

Koch also found sulphurous gas as an inert substance in respect to its action on microbes. During the epidemic of Cholera in France in June 1884, Pasteur conducted a series of experiments for the purpose of ascertaining what may be considered effective disinfectant. His experiments showed that sulphurous acid both in gaseous and liquid form was perfectly inert in killing germs of splenic fever. Latterly Wynter Blyth conducted a series of careful experiments upon anthrax bacillus with the following results :

"A 1 per cent. solution of Calvert's carbolic acid No. 1 in water seemed to have no influence on anthrax spores, not even delaying their growth. Even after soaking for twenty-four hours in a 10 per cent. solution of carbolic acid, the anthrax spores inoculated into a guinea-pig killed it in two days, with typical anthrax poisoning. Various carbolic powders were made into a paste with water; but though the anthrax spores were allowed to rest in the paste, even as long as twenty-four hours, no germicidal effect was noticeable. The sulphates of iron, copper, and zinc which are reputed disinfectants, in no case exercised any destructive influence on the life of anthrax spores. Of chloride of zinc, Dr. Koch has given a very unfavourable verdict as a disinfectant and as a germicide. Mr. Blyth testifies no more favourably of it. He found that anthrax spores grew well after a month's sojourn in a 5 per cent. solution of chloride of zinc, and the addition of thymol in no way altered the result. Perchloride of Iron was experimented with in watery solutions of various strength from 1 to 25 per cent. but in no single case did a twenty-four hours steeping of the spores destroyed their vitality."\*

Lately I conducted some experiments upon bacilli in putrid meat and blood, exposing them to the influence of certain disinfectants. I laboured under too many disadvantages to enable me to trustfully verify the above results for myself.

Among British Surgeons Duncan has shewn† that spray is useless to render the atmosphere aseptic, a verdict not accepted by Cheyne. Lister considers‡ that 1 to 3 per cent. solution is

\* *Lancet*, Dec. 20, 1884.

† *Edinburgh Medical Journal*, April, 1884.

‡ *Dublin Journal of Medical Science*, August, 1879.

sufficient to destroy organic life. Such is also the belief of Miquel.\*

It has however been found by many experimentators that corrosive sublimate in certain proportion is an efficient germicide, "being 250 times more powerful than phenol."† Sternberg estimates that 1 part of corrosive sublimate in 20,000 has a germicide value.‡

The discovery of bacilli tuberculosis has inspired in many an antiseptic method of treatment, and results are published of marvellous success attending such treatment. We are in the habit of seeing, in the wards of hospitals, consumptive patients with inhalers containing antiseptic substances. Arsenic, camphor, naphthalim, creosote, carbolic acid, aluminum, sulphur, eucalyptus, bromine, ethyl and methyl alcohol, boric and salicylic acid, resorcin, and styrone, &c., have all been tried in numerous hands.

Then the antiseptic surgery of the lung is also suggested and has been practised.§ Though success has attended the trial of some physicians as Kazansky, there is an equally large number of less fortunate physicians as Hiller, whose experience has shewn that antiseptics are entirely impotent to check the tubercular process, and this is not to be wondered at when we find that a large number of the so-called antiseptics are not powerful enough to kill the germs of phthisis. If corrosive sublimate is a trustworthy germicide a ray of hope arises in our mind that it may be effectively used in germ diseases. We are not, however, in possession of sufficient information and experience of reliable authorities to come to any definite conclusion. Corrosive sublimate is a great poison, and it is to be seen that the quantity required to kill the development of bacterial life does not produce toxic effects. In Hiller's patients corrosive sublimate was found useful, but they also received other treatment simultaneously. It is my impression that a bright future awaits for corrosive sublimate as a germicide agent. In surgical dressing in the treatment of parasitic diseases, in domestic dis-

\* Les Organismes Vivants de l' atmosphere.

† Amidon Delacroix.

‡ Medical News, May 1883.

§ Gazette Med. de Paris.

infection, its value is already recognized. But as long as the whole question of the value of germicides is unsettled, I think it is not safe to place implicit reliance on them in the treatment of such an important disease as phthisis. It is only at the early stage of phthisis that the help of a physician is of great value, and it becomes discreditable to the physician and dangerous to his patient if that golden opportunity is lost by using blunt weapons in the attempt to kill the enemy.

I have one observation to make in connection with the subject which is well worth the attention of the profession in India. We now find that the germ theory is the pivot on which pathology of many important diseases turns. Rational therapeutics can only be based on correct notions of the etiology and pathology of diseases, otherwise it is empiricism. The germ-theory is now occupying the time and energy of many of our professional brethren in Europe and America. Koch now claims to upset the treatment of such diseases as phthisis and cholera. Farran tries to protect people from cholera by inoculation. Tomassi-Crudelli finds in the field of his microscope germs of malaria, which is devastating our country. We in India enjoy many advantages to work in this department. We are not handicapped by Antivivisection Acts, we have opportunities of gathering unlimited experience of epidemic diseases. Besides, it is probable that under varying conditions of soil and climate the vegetable and animal organisms may have different life-history as regards rapidity of growth and power of resistance to germicides. In short, modern medicine requires its contribution from the modern physicians of an ancient race which attempted to build medicine on a scientific foundation more than any other nation in the world.

## REVIEW.

*The Knowledge of the Physician.* A Course of Lectures delivered at the Boston University School of Medicine, May 1884. By Richard Hughes, M. D. Otis Clapp and Son. Boston, 1884.

(Continued from p. 254, No. 6 & 7.)

In the second lecture, on the Knowledge of Health, Dr. Hughes has, under the headings of Exercise, Rest, Warmth, the Air we breathe, and Food, given quite an epitome of Hygiene.

Dr. Hughes repels the almost libellous charge brought against Hahnemann in utter ignorance of his life and precepts by men like Dr. Bristowe that he was a mere drug-giver, and that "for him preventive medicine would have been mockery and a snare." He beautifully shows that "the method of Hahnemann links itself with healthy living being. Its single, clean, mostly tasteless and odorless remedies suggest a regimen equally simple and pure: the gentleness of its medication consists only with a like non-perturbative dietary. He that dispenses with narcotics and blisters in illness will hardly abuse stimulants and condiments in health. The importance we attach to drug-giving makes us the more anxious to banish all that is medicinal—that is, poisonous—from our patient's surroundings, and so to secure for him the prime necessities of health—fresh air, pure water, and wholesome food."

Under each of the heads mentioned above Dr. Hughes gives very sound advice, representing "the matured results of nearly thirty years' study and observation." Exercise is desirable because it promotes the health and efficiency of the organism by enabling it to eliminate with rapidity effete products and replacing them with new matter. From the character of the subjects on which Dr. Weir Mitchell's treatment by massage succeeds, Dr. Hughes infers the class of persons on whom exercise should be enjoined. "The young hardly need the admonition—the problem of perpetual motion going far towards solution with them; and the old should not receive it, for, their power of repair being feeble, it is unadvisable to precipitate waste. It is the middle-aged—embracing in this category all lives from twenty to sixty; and among them those of luxurious or studious habits, and those whose occupations are sedentary."

The advice which Dr. Hughes gives under Rest is much needed in the present "age of overwork," and our young men would do well to lay it to heart. "To a man in active work eight hours are none too much for sleep alone; and if another eight are allowed for the care of the body and the play of the lighter faculties I am sure that the work done in the time which remains will be all the better in quality. It will be this, and it will go on longer. There will not be the tragedy so often enacted in these days, of a man in the prime of his powers and usefulness more or less suddenly 'breaking down,' all his accumulated force and his experience lost to the world because he had not husbanded his strength. \* \* The heart, that tireless worker, sets us an example here, for it rests during a fourth part of every pulsation, and beats at an almost uniform rate all the day long. Why should we not work thus evenly, rest at least thus proportionately?" It is to ceaseless work, work almost absolutely without rest, that we owe the premature departure from this world of such men as Keshab Chunder Sen and Kristo Das Pal. And we devoutly hope our young men will take a warning from their sad examples. To shorten one's life even by a single day is suicide, and suicide is one of the greatest of sins. . .

Under Warmth we are very justly told "that the main use of clothing is to keep in the caloric which the frame has generated—any end it may subserve in protecting from draughts of air being quite subsidiary!" It is the sense of warmth, and not the actual warmth of the body, that fluctuates with change of environment, and as a general rule this can be met by improving the state of the skin. And foremost among the measures for effecting this, is the 'morning tub,' the cold bath immediately on rising. Apart from the purposes of cleanliness which it serves, especially in tropical countries, it serves chiefly "as a means of making the skin less sensitive to cold,—of approximating the whole surface to the callousness of the face, which we expose to the coldest blasts without distress or peril." This last we look upon as a very wise and sound remark. The fear of exposure to cold is the great bug-bear which stands much in the way of personal hygiene. It is through this fear most people wrap their bodies with unnecessary clothing, and thus render their skins extremely sensitive to cold. There is nothing like getting accustomed to

cold and draughts. Of course we are perfectly aware that in every case this cannot be done without much risk of inviting internal inflammations. But this is quite feasible gradually, and it is worth doing to prevent the very inflammations against which so much warm clothing is used.

Under the head of the Air we breathe the author makes some very sensible and suggestive remarks on the sewer-gas, a new agent which, strangely though truly enough, modern sanitary arrangements have brought into being wherewith to contaminate the atmosphere. He refers to Dr. Blake's researches on the subject which have conclusively shown how "many forms of ill-health, as diphtheritic throats, morning headache and diarrhoea, unaccountable languor, anorexia, feverishness, and sleeplessness, passing on—especially in children—to anæmia and glandular suppurations," are traceable to its deleterious influence. As Dr. Hughes very properly adds, "to these probably every man's experience would supply additions,—I, for example, having seen ascarides in an adult obstinately persist while it was present, and immediately clear away on its removal." While we cannot agree with Dr. Hughes when he says that "sewer-gas cannot of itself initiate a specific disease," we heartily agree with him in believing that "it both spreads its germs and predisposes to their reception, and then—when the malady has been set up—tends to make it malignant, and—if the patient recovers—to retard his convalescence." And town practitioners would do well to bear in mind what he very justly says that "whenever there is an *x* in the morbid conditions with which you have to deal—some unknown factor making everything go badly and defeating your most just anticipations, there suspect sewer-gas, and look to the drainage."

But the difference between the air of one place and of another is not often due to man's action alone. It is a recognized fact that, notwithstanding the general constancy of its chemical composition, there is a vast difference between the air of the land and the air of the sea, between the air of one country and the air of another, between the air of the plains and the air of the hills, as respects their power of affecting and influencing man's health. A knowledge of this and of other correlated subjects, such as latitude, elevation, temperature, soil and water, all which constitute climate, is essential to the physician who has often to

recommmend particular climates to patients suffering from particular diseases.

Under Food Dr. Hughes discusses the relative proportions that ought to hold between the animal and the vegetable diet of man, and the dietetic value of tea, coffee, cocoa, tobacco and alcohol. "While I cannot endorse or practise," says he, "in its entirety the vegetarian regimen, I do so far agree with its advocates that flesh should be the exception, instead of the rule, in human dietary. The three meat meals a day, so favored in my country are alike wasteful and injurious. Wasteful, because animal food—fish, flesh or fowl—is the most costly of our aliments; and injurious, because less force can be made out of it in proportion to its bulk, than out of any other article of diet, and the residual substance goes to burden the liver with the formation and the kidneys with the elimination of urea, to an extent quite beyond their power. Hence—unless the most vigorous out-door exercise counteract the evil—there comes lithæmia, azoturia, and gout, if not organic disease itself."

With reference to tea and coffee, Dr. Hughes admits that they both diminish, waste and stimulate the nervous centres, and therefore are admirably adapted to circumstances involving much exposure and fatigue, "but, *per contra*," he says, "they seem less suitable to normal conditions and healthy bodies; and, though we may not condemn coffee so strongly as Hahnemann did, or anathematise tea with the Dean of Bangor, I think, there can be no doubt of their frequent abuse. I would keep them entirely away from the young; and if adults must use them, would have them ordinarily made too weak to produce any appreciable effect, increasing strength only according to need. Even then we must beware of being lulled to false security by their potent action. They check waste of tissue, and so far are useful as temporary conservators; but we must remember that the matter thus retained is partially effete, and that true health lies in its removal and replacement. By their gentle stimulation they take off the sense of fatigue; but this sense is nature's cry for repose, and if it is hushed up instead of its appeal being granted, a nemesis will sooner or later follow."

Of Tobacco Dr. Hughes speaks in the same remonstrating and prohibitive tone. It differs from tea and coffee in being a

sedative, instead of a stimulant. "It depresses from the first and its ultimate action is prostration and paralysis: \* \* If the brain and nerves are temporarily disturbed, and want quieting, I would not grudge the solace which a pipe can bestow. But surely this does not occur to all men every day, and several times in a day, as would be inferred from the practice of most smokers. To induce sedation without cause is—to speak plainly—a slight self-poisoning; and those who incur it should realise what they are doing." From personal experience we can say that after the most fatiguing work, intellectual or physical, we have never required either tea, or coffee, or tobacco. Simple rest was enough to restore the mind and body to their full working condition. Of tea and coffee we should simply say that they are absolutely unnecessary, but of tobacco we should say, with Mr. William Axon, that "it is the foe to youthful development, the bane of youthful blood and brain."

Of the deterious influence of alcohol as food our opinion is much more pronounced. That, which rouses the worst instincts and passions of man and degrades him to a level lower than that of the beast, deserves the most unqualified condemnation. "The conclusion must be," says Dr. Hughes, "that the use of alcoholic drinks is a custom more honored in the breach than in the observance. It is, for the most part, entirely unnecessary; and, when practised, should be so on the most limited scale." But he justly goes further and observes, "a man should be independent of it; and, that he may be so, should be brought up without it. Let the dietary of the young be non-alcoholic, if you love them; and then, as they grow up, you may pretty safely leave them to do as they like." It should, therefore, be the duty of every one, who wishes the intellectual and moral elevation of his fellowmen, to discourage by all means in his power the pernicious habit of using alcoholic beverages.

*(To be continued.)*

## EDITOR'S NOTES.

## LEMONS FOR MALARIA.

Dr. Crudelli, of Rome, gives the following directions for preparing a remedy for malaria which may be worth trying, as it is said to have proved efficacious when quinine has given no relief. Cut up a lemon, peel and pulp, in thin slices, and boil it in a pint and a half of water until it is reduced to half a pint. Strain through a linen cloth, squeezing the remains of the boiled lemon, and set it aside until cold. The entire liquid is taken fasting.—*Scientific American*, June 27, 1885.

## DR. KOCH AND THE POTATO

Dr. Koch tells the following story about the origin of his celebrated culture experiments. He had been, like many others, trying various kinds of decoctions and infusions, when walking along the street one day he noticed a potato covered with a fungous growth, and it occurred to him that disease germs might thrive equally well on the same nutriment. This was the beginning of his wonderful service of dry culture experiments; and as Prof. Whitaker expressed it at New Orleans, "The potato was to Koch what the apple was to Newton."—*Medical Times*, June 13, 1885.

## CHOLERA FROM TAKING COLCHICUM.

Dr. Walter Dickinson, in his address on the Geographical Distribution of Disease and the Preservation of Health in various Climates, published in the *British Medical Journal* of July 4th, thus speaks of a case of cholera from colchicum which occurred in India, when he had the opportunity of visiting that country in the beginning of winter, 1857.

Only one fatal case of cholera occurred in a man who was taking colchicum for rheumatic gout; catharsis was induced, soon running into cholera, with speedy death. I have observed several similar instances, both in England and abroad, where, during cholera-epidemics, the disease seemed to be caused by any irritant of the bowels, at other times innocuous, and irrespective, apparently, of any specific germ or contagium.

COCAINE IN BURNS.

Dr. Weiss writes : On December 25th, I was called to Professor L——. An atomiser which he was using had exploded, the hot steam badly scalding the Professor's lips, nose, eyelids, cheeks, and forehead. Pain was so intense that I apprehended general convulsions. I sent for sundry topical remedies, amongst them a two-per-cent. solution of hydrochlorate of cocaine. In the meanwhile I covered the injured parts with pieces of cloth dipped in olive oil ; on the top of these I applied ice-water compresses, renewing them every minute, without affording the slightest relief. When the medicaments arrived, I touched the injured parts with a hair-pencil dipped in the cocaine solution. I had scarcely finished when all pain had entirely vanished without any return. At my visit in the evening I found the patient quite easy and in good spirits.—*The Practitioner*, June 1885.

REMEDIES FOR DIFFERENT KINDS OF DELUSIONS.

Fear of contamination . Bovista, Caladium, Phosphor, Nux.

Fear of rain : Elaps.

Fear of thunder : Borax.

• Fear of thieves . Aurum, Conium, Ignatia, Zincum.

For Megalomania, that mania of egotism and pride : Calc. carb., Lachesis, Lycopodium, Mercurius, Platina, Silicea, Staphisagria, Sulphur, Veratrum.

Erotomania may find its cure in Antimonium crudum, Pulsatilla.

QUEBULANT MANIA.—Camphor, Lachesis, Lycopodium.

PYROMANIA.—Nearly all the remedies indicated in nostalgia and amenorrhœa, especially Aconite, Muriate of Ammonia, Belladonna, Pulsatilla, Stramonium.

Kleptomania, a hysterical affection . Arsenicum, Bryonia, Calcarea carb., Lycopodium, Nux vom., Pulsatilla, Sepia, Sulphur.—*Medical Counselor*, May 15, 1885.

DIAGNOSTIC VALUE OF THE FETAL HEART-BEATS.

Dr. Bolzoni has kept a careful record of the fetal heart-beats in all cases admitted to the obstetric clinic of the University of Padua for the scholastic year 1883-84. Of these he selected one hundred women between the eighth and ninth solar months of gestation, in whom delivery was normal. The heart-beats were counted in each three

times, always at the same hour, and the mean taken. On the birth of the child, its sex, weight, length, and biparietal diameter were entered in the register and compared with the previously determined heart-beats. He finds that the number of the heart-beats is not in relation to the sex of the child, but is in constant and proportional relation to the weight, length, and biparietal diameter; that is to say, to the mass of the body. The smaller number of heart-beats more frequently corresponds to the male sex, only because boys are as a rule heavier at birth than girls. The lowest rate observed was 112, and the highest 168. The first was in a boy of 4,300 grammes weight, 51 centimetres long, with a biparietal diameter of 10·5 centimetres. The second was a girl of 2,570 grammes weight, 46 centimetres long, biparietal diameter 9·5. The two most frequent rates were 128 and 144; to the first more boys than girls corresponded, and to the second more girls. With 128 heart-beats, the weight of the child (of whatever sex) was over 2,900 grammes; with 144, the weight was always less than this. The number of the heart-beats, then, is a more constant guide to the development than to the sex of the child.—*The Practitioner*, June 1885

#### SOME CHARACTERISTIC INDICATIONS IN EPISTAXIS.

##### *Accompanying Symptoms.*

*Millefol.*: Together with congestion of the chest cavity. *Carbo veg.*: With paleness of the face. *Coffea*: With heaviness in the head. *Paris quad.*: Sensation as though the eye were drawn, by means of, a thread, towards the centre of the head. Marked congestion at the root of the nose. *Coccus cacti*: With whooping-cough and severe sneezing. *Conium*: Blood in small drops and of a dark color, in old persons.

##### *Symptoms relieved by Hæmorrhage.*

*Brom.*: Chest and eye symptoms better from bleeding. *Bufo.*: Headache better (also *Magn. s.* and *Merc.*). *Cham.*: Confusion of thoughts improved. *Hamamelis*: Bleeding from ears and nose improves the head symptoms. *Petroleum*: Moderate nasal hæmorrhage improves the headache.

##### *Aggravation, etc., from Bleeding.*

*Borax*: Headache worse from bleeding. *Phos. acid.*: Epistaxis in typhus fever without relief. *Crocus sat.*: Hæmorrhages destroy the health of the child; (despair), dark blood; daily epistaxis in warm weather; nose bleeds easily; blood is hot, thick and black.

## General.

*Coffea*: Blood starting suddenly; very watery. *Oleum jecoris*: Bleeding from stooping, with amenorrhœa. *Nat. mur.*: Frequent epistaxis at night, brought on by stooping. *Rhus glabra*: Hæmorrhage from left nostril and mouth. *Corall.*: Bleeding every night (also *Nat. mur.*). *Coccus cacti*: Nasal hæmorrhage after sneezing—during whooping-cough. *Merc.*: Epistaxis during a coryza or at 10 A. M. accompanied by bleeding from the ear.—*Hahnemannian Monthly*, July 1885.

## POISONING OF AN INFANT THROUGH THE MILK OF ITS MOTHER.

PROF. BROUARDEL has recently (*Revue de Thérapeutique*, July 1) communicated the following interesting case to the Society of Legal Medicine. A man was charged with poisoning, by means of arsenic, his wife and his infant, whom she was then suckling. The child had died with the symptoms of cholérine some days after its mother had herself manifested analogous symptoms. As this occurred during hot weather, the occurrence did not arouse suspicion until November, when the woman and her mother, who lived with her (and whose money the man was charged with endeavouring to obtain by forgery), were both attacked with choleric symptoms. A paper containing white arsenic was also found in the pocket of the accused. As the death of the infant was now canvassed, Prof. Brouardel caused its coffin to be brought to Paris about six months after its burial. The body having been entirely converted into fatty matter, so that isolation of the viscera was impossible, it was submitted to analysis *en bloc*. Weighing about two-and-a-half kilogrammes, it yielded five milligrammes of arsenic, which certainly did not proceed from the linen in which the body was wrapped, or the soil by which the coffin was surrounded. The question now arose, whether the arsenic was eliminated by the mother's milk; and as the possibility of this had never been sufficiently investigated, Dr. Pouchet undertook some very conclusive experiments. He administered to some of the nursing mothers in the St. Louis Hospital, who had diseases of the skin, from six to twelve drops of Fowler's solution, and found that their milk always exhibited a relatively considerable quantity of arsenic. For example, the milk of a nurse who had taken eight milligrammes of arsenic for six days, was found to contain one milligramme in 100 grammes of milk. In such doses neither the nurse or the infants exhibited any symptoms. But it does not follow that the same result would have followed had the arsenic been exhibited in a single con-

siderable dose. The endeavour to ascertain this by experiment on sucking animals did not furnish any conclusive results, owing to the great difference in susceptibility to the action of arsenic, so that no conclusion obtained could be applied to the human subject. At all events these investigations show that the lacteal secretion is a predilectory channel of elimination for arsenic, and that it is imprudent to administer it to nursing women. The man was sentenced to 20 years hard labour.—*Medical Times*, July 11, 1885.

#### THE BEST METHODS OF DISINFECTION OF CHOLERA.

The Rome correspondent of the *British Medical Journal*, June 13, gives the following report of the subcommittee of International Sanitary Conference, consisting of Drs. Koch, Sternberg, Thorne Thorne, Proust, Eck, Semmola, and Von Hofmann, as the best methods of disinfection of cholera.

The Subcommittee recommends as methods of disinfection : 1. steam at 100°C.; 2. carbolic acid and chloride of lime ; 3. ventilation. Of the carbolic acid and chloride of lime, two solutions are to be used : *a.* the weak, containing 2 per cent. of carbolic acid and 1 per cent. of chloride of lime ; *b.* the strong, containing 5 per cent. of carbolic acid and 4 per cent. of chloride of lime. They are to be applied as follows : 1. For personal disinfection, by washing and bathing, with the weak solutions ; 2. For disinfection of linen, clothes, bedding, etc., if not destroyed—(*a*) by passing steam through them for an hour, (*b*) by boiling them for thirty minutes, (*c*) by immersion for twenty-four hours in one of the weak solutions, (*d*) by ventilation for three or four weeks, but only in cases in which none of the other methods are applicable. Leather articles—such as portmanteaux, hand-bags, etc., if not destroyed, are to be washed several times with one of the weak solutions. 3. For vomited matters and fæcal evacuations, the strong solutions are to be used. Recently soiled articles of linen, clothing, and bedding, if not at once subjected to steam at 100° C., are to be immersed for four hours in one of the strong solutions. There must be no washing of corpses. Bodies are to be wrapped up in sheets saturated with one of the strong solutions, and at once put in coffins. 5. Disinfection of goods, letters, and postal packages is superfluous. 6. For the disinfection of ships during the passage : The deck and glass where the case or suspected case occurred, and the walls of the cabin or bunk, are to be washed, at least twice, with one of the weak solutions, and then thoroughly ventilated ; while the water-closets are to be washed, at least twice daily, with one of the strong solutions.

7. If the drinking-water be suspected, it must be boiled before being used ; and, if it have stood twenty four hours after the first boiling, it must be reboiled. 8. In hospitals on land, the walls are to be washed with one of the weak solutions, then the wards ventilated, and finally white-washed, and the wards used for the reception of cholera-cases are to be as far off as practicable from the ordinary ones. The closets in such hospitals are to be cleansed twice daily with a quantity of one of the stronger solutions equal in amount to that of the evacuations passing through them. 9. The clothes of the attendants are not to be taken out of the hospital, and must be regularly disinfected ; and the attendants are to use one of the weak solutions for personal ablution. It was also decided to add to these recommendations another, to the effect that all packet-boats from infected ports should have a steam-disinfecting apparatus on board

#### THE LATEST WORD ON DISINFECTION.

Dr. G. M. Sternberg of the United States army has, in compliance with a resolution of the sanitary council of the Mississippi Valley passed on March 10 and 11, 1885, written a very nice and practical paper on disinfection and disinfectants. The most important points of this paper we reproduce below.

*Disinfection of excreta, etc*—The infectious character of the dejections of patients suffering from cholera, and from typhoid fever is well established ; and this is true of mild cases and of the earliest stages of these diseases, as well as of severe and fatal cases. It is probable that epidemic dysentery, tuberculosis, and perhaps diphtheria, yellow fever, scarlet fever, and typhus fever, may also be transmitted by means of the alvine discharges of the sick ; it is therefore of the first importance that these should be disinfected. In cholera, diphtheria, yellow fever, and scarlet fever, all vomited material should also be looked upon as infectious ; and in tuberculosis, diphtheria, scarlet fever, and infectious pneumonia, the sputa of the sick should be disinfected, or destroyed by fire. It seems advisable, also, to treat the urine of patients sick with an infectious disease with a disinfecting solution.

*Chloride of lime*, or bleaching-powder, is perhaps entitled to the first place for disinfecting excreta, on account of the rapidity of its action. The following standard solution is recommended :—

Dissolve chloride of lime of the best quality in soft water, in the proportion of four ounces to the gallon.

Use one pint of this solution for the disinfection of each discharge in cholera, typhoid fever, etc. Mix well, and leave in vessel for at

least ten minutes before throwing into privy-vault or water-closet. The same directions apply for the disinfection of vomited matters. Infected sputum should be discharged directly into a cup half full of the solution.

*Disinfection of the Person.*—The surface of the body of a sick person, or of his attendants, when soiled with infectious discharges, should be at once cleansed with a suitable disinfecting agent.

In diseases like small-pox and scarlet fever, in which the infectious agent is given off from the entire surface of the body, occasional ablutions with Labarraque's Solution, diluted with twenty parts of water, will be suitable.

In all infectious diseases the surface of the body of the dead should be thoroughly washed with a disinfecting solution, and then enveloped in a sheet saturated with the same.

*Disinfection of Clothing.*—Boiling for half an hour will destroy the vitality of all known disease germs; and there is no better way of disinfecting clothing or bedding which can be washed, than to put it through the ordinary operations of the laundry. No delay should occur, however, between the time of removing soiled clothing from the person or bed of the sick and its immersion in boiling water or in a disinfecting solution; and no article should be permitted to leave the infected room until so treated.

To keep a privy-vault disinfected during the progress of an epidemic, sprinkle chloride of lime freely over the surface of its contents daily.

*Disinfection of Ingesta.*—It is well established that cholera and typhoid fever are frequently, and perhaps usually, transmitted through the medium of infected water or articles of food, and especially milk. Fortunately we have a simple means at hand for disinfecting such infected fluids. This consists in the application of heat. *The boiling temperature maintained for half an hour kills all known disease germs.* So far as the germs of cholera, yellow fever, and diphtheria are concerned, there is good reason to believe that a temperature considerably below the boiling-point of water will destroy them; but, in order to keep on the safe side, it is best not to trust anything short of the boiling-point (212°F.) when the object in view is to disinfect food or drink which is open to the suspicion of containing the germs of any infectious disease.

During the prevalence of an epidemic of cholera, it is well to boil all water for drinking-purposes. After boiling, the water may be filtered, if necessary to remove sediment, and then cooled with pure ice if desired.—*New England Medical Gazette*, July 1885.

## CLINICAL RECORD.

### • CASES FROM THE EDITOR'S CLINIC.

#### 1. *A Case of Loss of Memory.*

J. L——, an East Indian, aged 47, was admitted into the Out-door Dispensary on the 15th June, 1885, for loss of memory and headache for the last 6 months. He said that he was always forgetful and does not remember words which were said to him half an hour before. He was in the habit of drinking for a long time, and had left off that habit only for the last six months. He thought that this forgetfulness and headache might be due to his former irregularities. The headache was of a dull nature, used to come now and then, and had no particular periodicity. Bowels regular *Nux v* 6 was prescribed.

On the 18th he reported himself to be no better, *Nux v. 6* continued.

• 21st. Finding no change *Anac 6* was prescribed.

24th. He reported that he was feeling much better. The headache has disappeared, and he could now remember the words he had heard better than before.

On the 30th June, he complained of slight heat; believing this to be due to medicinal aggravation, the medicine was discontinued.

• 3rd July. He said that he was feeling well. *Anac 12* was prescribed.

6th. He reported that he was doing very well and supposed that he had now his memory as sharp as he had before the sudden attack of forgetfulness. All medicine was discontinued.

#### 2. *A Case of sudden disappearance of Vision while Writing.*

D——, aged 42, a resident of Meteaburuj, and by profession a clerk, was admitted into the Out-door Dispensary on the 6th of July, 1885.

• He was suffering from sudden disappearance of vision while writing for about 20 days. The loss of sight would come at any time between 9 A. M. to 3 P. M., and last only about half an hour after application of cold water to the head, but an hour or an hour and a half if no measures were taken to relieve it. This distressing symptom would never come on while reading, nor during the night even when writing. He had also vertigo while walking, whose sudden appearance compelled him to sit down for a while. Frequent micturition

## *Clinical Record.*

and loss of sexual desire were the other complaints from which he also suffered during this period. *Crotalus* 6 was prescribed.

On the 6th, he reported that he was considerably better and had no loss of vision during that period. The same medicine was continued.

11th. His servant came and reported that his master was doing well, and had told him to have that medicine repeated.

The same medicine was continued for another 3 days, which relieved him of all his sufferings.

### 3 *A Case of Dysentery*

Abhoy Charan Ghosh, aged 45, was admitted into the Out-door Dispensary on the 15th of May, 1884

He was suffering from dysentery for 1 month. Griping, tenesmus, and straining during stool, and passing a few drops of blood after each stool, were the accompanying symptoms. After taking a powder prescribed by an old school physician he vomited bile and passed bilious stools mixed with blood. The stools became more frequent than before. *Nux v.* 6 was prescribed.

On the 18th, he reported that the pain in the bowels was much less, but the number of stools was almost the same. *Canth* 6

19th. No more pains in the abdomen. The number of stools as well as the blood and mucus became less. *Canth* 6 was continued.

21st. He had improved much, still there was some blood with the stools. The same medicine was continued, and he was advised to take gandhal (*Pæderia foetida*) soup for diet.

23rd. He reported that there was no more mucus and blood with the stools, and had no other complaints except his weakness. Medicine was discontinued.

On the 27th and 31st, reports were received that he was doing very well.

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### 4. *A Case of Pseudo-hypertrophic Paralysis (Duchenne)*

Manindra Mohan Sen, aged 11 years, was admitted into the Out-door Dispensary on the 7th of July, 1884

*Previous history.* The child had hypertrophy of the muscles of the calves of both legs about 6 years before. He was very healthy before the commencement of the disease, but subsequently he was getting thinner. He had two maternal uncles who were attacked with the same disease and died within 20 and 23 years. Other members of

the family were all well, and even this child's brothers and sisters were keeping good health.

*Symptoms during admission.* The child had a limping gait when he walked, and the position assumed was very peculiar. He did not stumble when walking, and on standing had his legs apart with the heels slightly raised. Both the calves were hypertrophied, but hypertrophy of other muscles were not visible. The calves were hard and firm to the touch. The antero-posterior curve of the spine was peculiarly prominent when standing and disappeared in the sitting posture. On standing he could not rise at once but did so by the help of his hands supporting the ground. Appetite dull. He did not continue our treatment for any very long time, and we could not ascertain what became of him afterwards

### 5. *A Case of Urinary Calculi*

Judan Ghosh, a milkman of Shetpur near Baraset, presented himself for treatment at the Out-door Dispensary on the 11th Nov., 1884.

He was passing at first white sediment with his urine which was clearly visible after being deposited. This sediment was gradually replaced by small concretions which gave him trouble during micturition. Though he had no decided obstruction still the urine was passed in a thin stream, and by great effort he succeeded in passing out these concretions. *Lyco* 30 was prescribed.

14th. No decided improvement was reported. The same medicine was continued.

19th. He said that he had not passed any more gravel after the 16th.

From the commencement of taking the medicine every morning he used to pass small gravels till the 16th, on the morning of which day he passed a pretty large one about the size of a pea, elongated in shape, and since then he has been doing well.

The same medicine was continued up to the 21st of November, relieving the patient of all his urinary troubles.

### 6. *A Case of Hæmaturia.*

Bhola Nath Sadhukhan, aged 45 years, came to the Out-door Dispensary on the 7th March, 1885. He had the first attack of hæmaturia about 20 years ago. About 10 years before he had a relapse for the first time, and in August 1884 for the second time; this second relapse had lasted about a month. He got rid of the previous attacks

without taking any medicine. He was suffering from the last attack for the last 12 days. He passed blood 5 or 6 times during 24 hours. It was more in the day time than in the night. There was no history of gonorrhœa or syphilis. *Carbo v. 12* was prescribed.

10th March. Some improvement being reported, the same medicine was continued.

13th. Doing very well. *Carbo v.* was continued.

16th. About three-fourths of his complaint have disappeared. *Carbo v. 30.*

A few days after, report of his perfect recovery was received.

### 7. A Case of Mitral Regurgitation

Nani Madhub Pal, aged 36, was admitted into the Out-door Dispensary on the 4th May, 1885.

The patient had had malarious fever for a long time. After the fever had been cured he was attacked with rheumatism, since which the affection of the heart has come on. He has been suffering from the heart disease for about 5 years and has been treated by Kavirajs and old school physicians but to no effect. He had gonorrhœa also long before the attack of rheumatism.

*Symptoms on Admission.* He complained of a pain and palpitation in the præcordial region with sudden attack of vertigo and fainting.

On auscultation a distinct bruit was heard loudest at the apex with the first sound of the heart. He was also suffering from seminal debility, sleep disturbed by dreams, and costiveness. *Spig. 6* was prescribed.

8th. On auscultation the bruit was heard to be less distinct than before. *Spig. 6* was continued.

12th. He said that his palpitation was much better. *Spig. 6* was continued.

On the 15th, further progress was reported and the same medicine was continued.

19th. The heart sounds were almost normal, the pain in the chest was also much less, but his costiveness was continuing. *Nux v. 6* was prescribed.

22nd. He reported that he had no more complaints. Medicine was discontinued.

## THERAPEUTICS OF CONSTIPATION, DIARRHŒA, DYSENTERY, AND CHOLERA.

### 78. CUPRUM.

#### **Constipation :**

1. Constipation, which ultimately became very obstinate.
2. Bowels alternately costive and loose.

#### **Diarrhœa :**

1. A kind of D., though the fæces were not very thin.
2. Violent D.
3. The first alvine evacuations are often of a green colour.
4. Very offensive and copious sts. which were uncommonly green ; some relief from the evacuations
5. D., with violent vomiting and nausea

#### **Dysentery :**

1. Painful green sts , with violent cutting and tenesmus.
2. Bloody diarrhœa.
3. Tenesmus with scanty dark, pulpy motions

#### **Cholera :**

1. Diarrhœa, with frequent vomiting and colic, as in cholera.
- 2 Watery sts preceded by cutting pains below navel, the abd. being painful on touch , recurring several times through the day. (This symptom, having been obtained with Fincke's transcendental dilutions, is of doubtful value )

#### **During St**

1. Violent cutting and tenesmus.

#### **After St**

1. Relief.

#### **Rectum and Anus :**

1. Tickling in the rectum, as from pin-worms.
2. Sharp sticking just above the anus
3. Tenesmus.

#### **General Symptoms :**

1. Slight attacks of deathly anxiety, without heat.
- 2 Aversion to everything Disinclination to work, yet idling is burdensome.
3. Vertigo accompanies all the symptoms. Vertigo when reading ; when looking up
- 4 Expression anxious. Complexion haggard, look miserable. Paleness of the face. Bluish face, with blue lips. Face sunken, emaciated, of greenish-yellow colour.
5. Icteric colouring of the face and surface generally.
6. Tongue : furred, foul dry ; pale with a thin whitish coating ; white in the middle and red at edges.
7. Occasional spitting of blood from mouth, especially in morning on rising from bed.
8. Abundant salivation. Much mucus in the mouth. Frothing of the mouth.

9. Taste sweetish, metallic ; disagreeable and nauseous ; bitter ;  
salty, sour ; coppery taste and troublesome burning in  
throat.
10. A feeling of constriction and acute pain in the throat.
11. Audible gurgling of drink down the throat, while drinking.
12. Loss of appetite ; his strength became reduced, the whole  
body emaciated, then he became fearful, showing a want of  
courage ; bowels alternately costive or loose ; and finally  
violent colic.
13. Eats very hastily. Desire for cold rather than warm food.
14. Burning thirst
15. Constant eructation. Hiccough. Heartburn.
16. Excessive nausea. Nausea in attempting to swallow animal  
food, although he chewed it abundantly.
17. Nausea, followed by vomiting of fluid arterial blood
18. Repeated and violent but useless efforts at vomiting (retch  
ings).
19. Vomiting of bilious fluid.
20. Vomiting relieved by drinking cold water.
21. Excessive tormenting pains in the stomach and epigastric  
regions.
22. Violent pressure at stomach, with contractive pains at  
intervals.
23. Abdomen tense, hot and tender to touch.
24. Abdomen stretched like a board, drawn in and sore to touch.
25. Spasmodic motions of the abdominal muscles.
26. Cramp-like pain in abdomen, as if drawn together with a  
fist, and urging to diarrhœa without effect
27. Violent intermittent colic. Gripping in abd. after taking  
warm milk in morning. Colic-like gripping in abd. imme-  
diately after taking green vegetables, relieved by rest and  
lying down, but followed by very great weakness. The  
pains in abd. are aggravated by pressure.
28. Enteritis.
29. Micturition more seldom and more scanty than usual.
30. Difficulty in passing urine, consisting in painful inability,  
requiring considerable time and effort to relieve the  
bladder.
31. Difficult, labored respiration. Spasmodic attack of dyspnœa,  
the chest feels constricted, respiration is difficult even to  
suffocation ; on remission of this spasm, spasmodic vomit-  
ing, followed by remission for half an hour.
32. Emaciation. General convulsions. Trembling.
33. Restless tossing about and constant uneasiness.
34. Uneasiness of the body, with jerking of the limbs, of arms  
and hands.
35. Cramp in the leg from the ankle up into the calf.
36. Convulsive paroxysms during sleep, twitching of the fingers,  
arms and hands backward and inward towards the body,  
drawing back of the feet ; at one time she opened the eyes

and distorted them, at another closed them and distorted the mouth.

37. Epileptiform convulsions, he trembled, staggered, and fell down unconscious, without crying; frothing of the mouth; the trunk was bent outward, the limbs were forcibly thrust outward, with open mouth.
38. Sleeplessness. Deep sleep, with twitching of the limbs.
39. Great weariness after walking.

## 79. CUPRUM ACETICUM.

### Constipation.

1. Prolonged C., with slight drawing pains about the umbilicus and flanks from time to time, seldom lasting over one hour.
2. Obstinate constipation with persistent tenesmus.

### Diarrhoea:

1. Profuse D., the sts continued for a long time, with violent tenesmus and prostration.
2. Sts., copious, watery, dark.
3. Violent D.
4. Frequent small bilious sts., with burning and tenesmus.
5. Sts. involuntary, liquid, not very copious.
6. Profuse involuntary, liquid, green, and offensive sts.
7. Grayish sts.
8. Copious greenish diarrhoea and violent pain in the bowels attended by violent vomiting of greenish water.
9. Diarrhoea with colic, together with retching.

### Dysentery:

1. Slimy, mucous, brown, afterwards greenish sts., mixed with streaks of blood.
2. Very frequent liquid sts., with a great deal of bright blood, and shreds of membrane, sometimes very scanty, sometimes more abundant, sometimes containing fragments of solid faecal matter.
3. Blood in small quantities, and slimy mucous stools tinged with blood, were passed from the rectum. Shreds of lymph and frothy ashen-coloured secretions were forced from the bowels by dint of straining. Without affording relief these discharges aggravate the sufferings.
4. Sts. small, greenish, of slimy mucus, preceded by violet griping, followed by great urging like the tenesmus of dysentery.
5. Bloody discharges from the bowels. Sts. almost consisting of clear red blood.
6. Sts. scanty, mucous, at first brownish, afterwards greenish, and on the next day streaked with blood.

### Cholera:

1. Awakened at 2 a. m., while lying on abdomen, by a copious liquid st., so hurried that it escaped over a portion of the bed, with colic and headache.

**Before St :**

1. Violent griping. Great colic,

**During St :**

1. Burning.
2. Tenesmus.
3. Colic Violent griping.
5. Headache.

**After St :**

1. Aggravation of sufferings.
2. Violent griping.
3. Great urging. Tenesmus.
4. Relief of general symptoms.
5. Sensation of heaviness and uneasiness at the rectum.
6. Smarting at the anus.

**Rectum and Anus :**

- 1 Rectum so inflamed and sensitive that an enema could not be administered.
2. Frequent urging to st
3. Constant violent, painful tenesmus
4. Severe tenesmus and burning sensation felt within the rectum, and close to the sphincter ani.

**\* General Symptoms :**

1. Attacks of mania, with full, rapid hard pulse, inflamed eyes, mild look and disconnected talking, ending in sweat.
2. Delirium. Great anxiety.
3. Vertigo, a marked and persistent symptom, out-lasting all others, though generally relieved by the evacuations from the bowels
4. Countenance heavy. Features sad, depressed. Face expressive of great pain.
5. Face pale, collapsed
6. Jaundice with the vomiting and eructations, sensation of heaviness in the head, difficult hearing, grayish stools, great thirst, dark turbid urine with yellowish sediment.
7. Face flushed, red and swollen.
8. Tetanic contraction of the jaws and spasm of the pharynx.
9. Tongue coated white or yellowish, moist ; margins red while the back remained pale ; or the whole tongue seemed red with enlarged papillæ but moist, in the worst cases it became very red and dry, the papillæ very prominent, giving the tongue a rough look ; when the disease was at its height it was cracked and brownish.
10. Dryness of the mouth and throat with or without thirst. Much viscid saliva.
11. Taste, flat, foul, nauseous, bitter, metallic, sweetish, coppery.
12. Throat very much swollen and inflamed, difficulty of deglutition. Spasm of the throat which prevents speaking.
13. With ineffectual attempts at vomiting, they suffered from a distressing feeling of constriction in the course of the

œsophagus, and across the chest, in the direction of the diaphragm.

14. Loss of appetite, even aversion to food.
15. A great desire for acids ; they want nothing else.
16. Intense unquenchable thirst.
17. Frequent bitter and sourish eructations preceded by hiccuph.
18. Nausea and vomiting of greenish liquid.
19. Vomiting of ingesta ; green fluid, blood and mucus.
20. Very frequent vomiting, usually after drinking.
21. With the cramps, a constant vomiting of greenish and yellowish green-bile.
22. Violent pains and cramps in stomach and bowels.
23. Violent griping and pressure in the stomach, followed by vomiting.
24. Abdomen tympanitic and painful on least pressure.
25. Retracted abdomen.
26. Colic with almost constant urging to sit
27. Extremely, violent, colicky cutting pains, constricting the abdomen.
28. Abdomen so sensitive that she could not bear any covering.
29. Pain in the intestines were terribly aggravated by pressure of the hand
30. Evacuations of the bladder and bowels, with relief of the symptoms.
31. Involuntary passage of urine. Urine scanty.
32. Retention of urine. Suppression of urine and fæces.
33. Urine dark red, turbid with yellowish sediment.
34. Micturition every five or ten minutes ; he was however able to pass only a little urine, the passage was attended with smarting, as from soreness in the urethra.
35. Trembling, convulsion and spasm of the limbs.
36. Emaciation. Prostration. Great restlessness
37. All the symptoms of cholera morbus.
38. Enormous vomitings, profuse discharges of bile both upwards and downwards, inflammations and erosion of both stomach and bowels, convulsions, syncope and death.
39. After diarrhœa, relief of the pains and of the hardness of the abdomen followed usually by the nervous symptoms.
40. Lethargic sleep and vomiting.
41. Comatose state.
42. Sleep uneasy, not refreshing.
43. Coldness and cramps of limbs.

**Remarks :** Copper and its salts are unquestionably irritants of the whole alimentary tract, causing inflammation, and ulceration, even to the extent of perforation of the intestines. But it has an unquestionable action on the cerebro-spinal system. It is difficult to determine whether these various actions are independent of each other, or

whether one of them leads to the other. It is generally supposed that the action of copper on the gastro-enteric system is primary, whereas its action on the cerebro-spinal system is secondary, *after* absorption, as if the gastro-enteric action was due to direct local irritation. We do not think this view is correct. Both sets of actions are due to specific affinities of the poison brought into play after absorption. And though it is true that the cerebro-spinal symptoms, such as "severe headache, great depression, restlessness, trembling of the limbs, cramps, coldness of the surface, small irregular pulse, dilatation of the pupil, with stupor, coma, tetanus or paralysis," are, as Taylor remarks, commonly preceded by vomiting, purging, and colicky pains in the abdomen, yet, as the same authority observes, "in some cases the symptoms at once assume a nervous character." Then, in animals rapidly killed by the cupreous poisons, no morbid appearances are found, from which Pereira justly concludes that death must have been produced by their action on the nervous system. We have the further fact that when administered in emetic doses, from five to fifteen grains, it is known to "act with great celerity, leaving no nausea or malaise behind." Here the action is direct upon the pneumo-gastric nerve, whether at its periphery or at its centre—is a different question.

• Copper and its salts have not had their trial in our school in inflammatory diseases of the alimentary canal to which its undoubted physiological action points. The old school practitioners are, in this respect, ahead of us, for they use the sulphate of the metal in chronic diarrhœa with considerable and deserved success. The success would be greater still if the drug could be used in less than physiological doses, and in exact correspondence not only with the pathological conditions, but also with the distinctive symptoms which it produces. One great characteristic of the action of copper is that the stomach and the intestines (small and large) are simultaneously affected, and that therefore associated with diarrhœa and dysentery we always have violent vomiting and nausea. As a general rule the discharges, whether upwards or downwards, the vomited matters or the stools, are of a green color, but this is not necessarily due to the color of the salt of copper administered; it as often is due to the copious discharge of bile which the liver secretes abundantly under the irritating influence of copper. Both the diarrhœa and the dysentery caused by copper are of an inflammatory character, and to such diarrhœa and dysentery it must be therefore eminently homœopathic. In addition to the character of the stools, the chief guide to the selection of copper in these cases is the characteristic excruciating colic which is slightly relieved by bending double, and aggravated by pressure, and warm milk and green vegetables. The tension, heat and tenderness of the abdomen point to the inflammatory action that is going on within, and of which the diarrhœa or the dysentery is merely the symptom.

Is copper homœopathic to cholera? It would undoubtedly be if the choleraic symptoms we have mentioned under the metal were genuine symptoms. But the authority for the first of these symptoms is not obtainable, and the character of the potencies which are reported to

have produced the second throws a suspicion over its reality. Hempel, in the 2nd Edition of his *Materia Medica*, related the cases of poisoning of a lady of sixty-seven years, of her daughter aged thirty-nine, and of a servant girl, twenty-two years old, from partaking of chicken fricassée, which had been cooked in a badly tinned copper saucepan. In all these the symptoms were "ineffectual efforts to vomit, contraction and dryness in the inner mouth, thirst, violent pains in the epigastrium, colic, followed by several watery, whitish stools. These symptoms continued on the following morning; the daughter was moreover attacked with uninterrupted anguish, convulsions, painful and hard swelling of the abdominal walls and frequent fainting turns." These appear to be genuine symptoms of copper poisoning, but why the case has been removed from the last (3rd) Edition of the work by Dr. Arndt we cannot make out. Then again, Allen gives under *cuprum aceticum* a symptom derived from a case of poisoning by artichokes kept in a copper vessel, which has a great similarity to cholera evacuation from the time of its occurrence which was 2 o'clock in the night, and also from its character. As we have no reason to doubt the genuineness of these symptoms, we are forced to admit that though the gastro-enteric action of copper and its salts are generally and eminently inflammatory, yet that action, like the gastro-enteric action of arsenic, may also be, in particular cases and under particular conditions, non-inflammatory in the beginning, and thus so far analogise with the action of the cholera poison.

But it is not the stools alone which constitute copper homœopathic to cholera. We have the greatest similarity presented by the drug when, associated with the characteristic stools and vomiting, we have spasms of the muscles. What is the characteristic of the spasms in cholera to which copper corresponds? Our readers will remember, Hahnemann recommended *cuprum* in cholera when the disease has passed into what he calls the second stage of *clonic spasmodic* character. Clonic spasms are convulsions, and except in the very rare cases of children, and in some of the rarest of the cerebral sequelæ of the disease in adults, convulsions or clonic spasms never form a symptom of cholera. It is true Hahnemann derived his knowledge of cholera from reports. But we cannot believe that in any professional report of the disease convulsions were described as a symptom. It is difficult, therefore, to understand how Hahnemann could have made such a mistake. From the narration of the symptoms that he gives of this stage, we cannot make out if he looked upon convulsions as one of them. "Excessively painful cramp in the calves, and spasms of the limbs," are all the details he gives of the spasms. Though "cramp in the calves" belongs to the category of tonic spasm, "spasms of the limbs" is a vague term, and might mean tonic or clonic spasms, and we have no means of ascertaining which was meant by Hahnemann. But we need not attach much importance to what Hahnemann might have understood by clonic spasmodic, when we know that copper is capable of producing both tonic and clonic spasms, cramps and convulsions. Provings and poisonings show that

copper can produce spasms in the muscles of the extremities; in the muscles of the abdomen; in the muscles of the chest, causing spasmodic attacks of dyspnœa, and rendering the respiration difficult even to suffocation; probably the spasm of the diaphragm have much to do with such arrest of breathing. Copper produces spasms also in the muscles of the jaws and of the throat. Thus copper very closely approaches that variety of cholera which is characterised equally by gastro-enteric irritation and by tonic spasms of the voluntary muscles, and probably also of the diaphragm. One characteristic of cuprum spasms is, according to Lilienthal, that they start from the utmost extremities of the peripheral nerves, of the fingers and toes. Though this is not substantiated by positive provings we may just bear it in mind, in order to see if it will admit of clinical verification. Of the same nature is Kafka's differentiation between the spasms of cuprum and those of secale, namely, that the former are chiefly confined to the flexors, the latter to the extensors.

In the present state of our knowledge it is extremely difficult, if at all possible, to determine which to prescribe in a given case of disease, the preparations of the metal or of any of its salts. The salts of the metal are certainly more energetic in their action than the metal itself, and hence as homœopathic remedies we would prefer the pure metal so long as it does not disappoint. If it fails to produce the desired effect we may then have recourse to the acetate, or even the sulphate (a more easily obtainable salt).

## Gleanings from Contemporary Literature.

### TREATMENT OF DIPHTHERIA.

BY DR. WINDELBAND.

(Zeitschrift der Berliner Hom. Aerzte, IV, 1)

In the fourth part of the second volume of our journal, we requested the homœopathic physicians of Germany to aid us in producing statistics about the treatment of diphtheria, but so far we are fearfully disappointed, as not one communication was received outside of this city, and then we feel astonished that our school does not show better in comparison with the literature of the old school. We know that our physicians have a large practice to attend, and every one does not feel inclined to give spare moments to literary labors, but if only that will-power were a little more exerted, every one could and ought to do his duty.\*

In relation to the essence of diphtheria, its origin, the mode of transfer from one organismus to the other, darkness still prevails, though hypotheses are plenty, modes of treatment are numerous and differ most wonderfully. All schools consider this murderous disease an infectious one, and many consider the removal of the products of disease the prime indication; whereas Homœopathy considers such treatment rather superfluous, and attacks the morbid process with internal remedies, according to the law of similarity (here we find the different Mercurials, Apis, Iodum and Arsenic in the front ranks, and experience has shown their power to deal with the enemy).

Even the old school acknowledges now the great value of Mercury in diphtheria, and Prof. Hugo Schulz says, in his prize essay, after showing up to the insufficiency of the usual internal and external treatment with Lactic acid, Papanum, Argentum nitricum, Chloride of iron, Carbolic acid, Salicylic acid, Oleum Eucalypti, Kali hypermangan., Kali chlor., Kali brom., Pilocarpinum, Merc. corr., etc., he wants to find a remedy which attacks the disease by internal medication, and at the same time paralyzes or destroys the diphtheritic poison, and thinks some of the preparations of Mercury answer this purpose.

"When the diphtheria raged last Summer and decimated the children in Greifswald, I proposed to Prof. Mosler Mercury for diphtheria, especially as Dr. Rothe had already treated, according to the method of Edlefsen, more than seventy cases with *Mercurius cyanatus* without losing a case. But already, before Edlefsen, Grafe recommendedunctions of grey ointment in conjunctivitis diphtheritica, and already, in 1869, Dr. Von Villers, of St. Petersburg, extolled its virtues before the Central Institute of Homœopathic Physicians of Dresden.

\* The same complaint everywhere, and the same absence of will-power for literary work. The *Allgemeine Hom. Zeitung* laments that its pigeon-holes are fearfully empty, the French journals contain the reports of the meetings of their respective societies and extracts from works which some of their editors intend to publish; the noble *British Quarterly* has printed its last number and retires from labors which failed to be appreciated, and we fear our *American Quarterly* will follow in the same footsteps. Our monthlies are too often without interest, but why do the grumblers not make them more interesting. The greater the practice, the greater the experience, and it is only a duty to let our younger confrères partake of this experience, through the pages of our journals. Away with such abominable indifferentism.

"What is the action of Mercury in diphtheria? We know that the faucial mucous membrane, with its numerous glandular formations, is easily affected by Mercury, and that it is easily excreted with the secretæ of the mouth. Experiments teach that the absorbed Mercury acts in the organism as a chloride, as corrosive Mercury, though naturally, in most finely divided form. When, then, the corrosive, dissolved in the blood and in the juices, reaches the glands of the mouth, it will be discharged with the faucial secretæ, and thus acts on every part in that region. We know full well that here the measure of the usual therapeutic doses fails, for only extremely minute doses of the Mercury reach the affected parts. In fact, we have here a kind of perpetual action as the import of corrosive Mercury lasts for some time during this continued medication, whereby a part of it is steadily absorbed. Another benefit is that during such treatment, the diphtheritic poison, coming in the circulation, is steadily under the influence of the corrosives.

"At first hypodermic injections were used, but soon discarded, and external medication considered more preferable. Rothe uses a watery solution *Mercur. cyan.*, 0.01, *Aqua destillata*, 120.0 (4 ounces), a tea or tablespoonful every hour according to the age of the child. This continued reception of such small doses effects far more to our purpose than larger doses at long intervals. Its absorption takes place more rapidly. Inhalations and gargles may be given if so desired."

Dr. Sulzer, of Berlin, treated 79 cases of fully developed diphtheria, and in nearly all cases, *Mercur. cyan.*, 0.3, and *Apis mel.*, 0.3, in rapid alternation were used. Laryngeal diphtheria was seen in 16 cases, with 5 deaths. Complication with scarlatina in 14 cases. A few cases as samples.

Martha B., æt 6 sick with diphtheria for a few days; an elder sister just dead, both under allopathic local treatment. 16th, evening. *Apis*, 0.3, *Mercur. cyan.*, 0.3, and *Hepar*, 0.3, every twenty minutes 3 drops. 17th, cough loose, but great dyspnoea, tracheotomy and recovery. Another little sister died from laryngeal stenosis. Another sister recovered in a few days under *Mercur. cyan.*, 0.3, and *Apis*, 0.3, three drops every half hour.

A little child, æt. 15 months uvula and velum palati covered with thick diphtheritic membranes the same treatment produced a slow improvement, but during the following night high fever, dyspnoea, frequent respiration, fine vesicular murmurs over whole chest and exitus lethalis.

A little girl, æt 5 severe attack. 9th, albuminous urine. 10th, coating of a bad color and worse odor, teeth and lips covered with sticky, brown mucus; nose stopped up with bloody purulent crusts, great prostration, hoarseness. *Hepar*, 0.3, in alternation with *Mercur. cyan.*, 0.3, and *Apis*, 0.3. 12th, croupy cough, considerable laryngeal stenosis, constant sleepiness with continual restlessness. 13th, less diphtheritic coating; tongue, teeth and lips covered with sordes; great dyspnoea; jumps up frightened and grasps everything. Omit *Apis* and give *Brom.*, 0.3, and inhalations of warm water, in which some *Brom-water* is mixed. Cough loosens, but during the night there is such accumulation of mucus that the father gives *Cuprum sulf* as an emetic. More albumen in urine. 14th, dyspnoea still present, but loose cough; coating less, hardly any fetor; child looks brighter. 15th, easy breathing, with loose cough; deposits gone. Gradual uninterrupted recovery.

A male child, æt. 5. 18th, diphtheria for the last three days; also larynx affected. No improvement under local treatment. *Mercur. cyan.* and *Apis* in rapid alternations. 26th, hardly any improvement so far; deep necrotic ulcer on uvula and velum. *Arsen.*, 0.6, in solution, a teaspoonful every hour. 27th, ulcer continued to spread. *Mercur. cyan.*, 10th dilution, 3 drops every two hours. Henceforth steady improvement, only

some aphonia left for some time, which was removed by Phosphor., 0.6. A nearly general paralysis followed, so that the child could neither stand erect nor walk, which also yielded to the continued use of Phosphor., 0.6.

Ella, æt. 6½, sick five days; scarlatina and diphtheria, bad prognosis. May 13th, the whole throat, fauces, velum, uvula and tonsils covered with dirty diphtheritic patches, right maxillary gland fearfully swollen; larynx affected, but so far very little dyspnoea. Merc. cyan 10, 3 gtt. every two hours. June 19th, doing well, gland suppurates, other glands around the neck also pass into suppuration under the use of Merc. sol H, 0.3, and Hepar, 0.2. Furuncles appear on different parts of the body. Cured.

M. B., æt. 17: May 11th, diphtheria, Merc. cyan 10, 3 gtt. every two hours. Slow improvement after discharge of a great deal of pus from the nares.

L L, æt. 7 May 29th, skin red on several places; white coating in throat. Merc. cyan 10. Apparent improvement, so that the child gets an airing after the third day. June 7th, down with scarlatina, with high fever, throat inflamed, no coating. Bellad, 3 globules in solution, teaspoonful every two hours. June 9th, whole throat filled with diphtheritic deposits, tongue thickly coated, sores on lips, great prostration. Merc. cyan. 10, 2 gtt. every two hours. Slow improvement. June 15th, on both sides of the uvula, deep necrotic ulcers; larynx affected, very hoarse, but no croupy cough when coughing. June 20th, ulcers more flat and cleaner, and gradual recovery.

Walter H., æt. 2 sick a few days. June 12th, great dyspnoea, laryngostenosis, croupy cough, severe diphtheria of both tonsils. Merc. cyan., 0.9, and Hepar 3, in alternation. Bags of warm salt over the larynx. During the evening, Iod, 5; rattling in the lung, death in the morning. His brother, Otto, æt. 5, took sick at the same time, some diphtheritic spots on tonsils. Merc. cyan, 10, 2 gtt. every two hours. June 14th, no deposit, boy feels well. June 16th, croup during the night, excessive difficulty of breathing, croupy cough. Spongia, 200 and Acon. 200 (Jenichen), globules in alternation, teaspoonful from solution every hour. Cough loosens immediately and child is saved.

Waldemar, æt. 11. excessive prostration from the start. July 6th, heavy diphtheritic deposits over the whole right tonsil. Merc. cyan, 10 globules in solution, every three hours a tea-spoonful. Well in three days. His sister, Frida, sick already for a few days. July 6th, diphtheria of tonsils and of posterior nares. Same treatment. Sister Lizzie is ailing already for two weeks. Throat clear, but the nose greatly affected, discharging acid pus, nostrils sore. Merc. cyan. 10, in solution, cured her rapidly.

Gustav S., æt. 4. October 20th. Diphtheria in a delicate child with a very large head and mentally poorly developed. Merc. cyan., 10 globules in solution, teaspoonful every three hours. October 23d. Only slight deposit and feels nearly well. At noon a rough, barking cough sets in, followed by dyspnoea, and croup fully developed. Hepar, Bromium, Brom-inhalation, and death October 26th, in the morning. His brother, æt. 6, a wide-awake boy, enjoying the best of health, took sick the same day; it took the same day; and he also succumbed to croup.

Anna M., æt. 5; attack began October 21st, and treated allopathically with local measures. October 25th. Heavy deposits, exquisite croup, considerable dyspnoea. Merc. cyan. 0.3 and Hepar 0.3 in alternation. October 26th. State the same; Bromium inhalations. October 27th. Very bad state, tracheotomy refused; Iod. 4, with Hepar in alternation; cough somewhat looser, but worse again towards evening. The mother gives, at the advice of a neighbour, a tablespoonful of Oleum terebinthinae and as this fails to produce emesis, an infusion of tobacco in milk, which

## *Treatment of Diphtheria.*

causes considerable vomiting. October 28th. Breathing more easy, still considerable deposits. Continue Iod. 4 and Merc. cyan. 0.3. Gradual recovery, though hoarseness lasted yet for a long time.

Helene R., æt. 5, parents live in a cellar, and she had scarlatina and diphtheria in April. October 30th. Heavy deposits; Merc. cyan. 10, three drops every two hours. Gradual improvement up to November 4th, when croupy symptoms appeared. Iod 4 and Hepar 3, with great relief, but steadily increasing prostration, pulse and heart-sound grow weak and the child dies, November 8th, from paralysis of the heart, though breathing is perfectly easy.

G. L., engineer, æt. 30, sick with diphtheria for a few days. Gargarisma of a strong solution of Carbolic acid and heavy port wine. December 28th. Prognosis infaustissima and advised to make his will. Sulzer is called in the morning and finds speech difficult, tonsils swollen, extensive inflammation of the whole mouth, with large, dirty, foul deposits and extreme prostration. Merc. cyan 3 and Apis 3, every 20 minutes three drops, in alternation. At noon of the same day some show of improvement, four days afterwards patient was able to get up, but the ulcerations in the throat took some time to heal up.

### OBSERVATIONS BY DR. BURKHARD (BERLIN)

Dr. Burkhard treated during 1883 ninety-one cases of diphtheria, and had to deplore six fatal cases. Scarlatina frequently complicated the disease. The remedies most frequently used were Mercur. cyan. and Apis, both in the 3d dec. potency, and mostly in hourly alternation, as long as there was no croup or any other complication. Lately Apis was frequently put aside and Merc. cyan. given alone successfully. In croup the Bromide treatment gives still the best hope, although not too much trust can be put upon it. As dilutions do not keep, it is better to take from the saturated watery solution, as it swims above the Bromide, enough to give to the vial with distilled water, a golden yellow color. In failure of the heart's action Arsen. holds out the most promise.

### OBSERVATIONS OF DR. KLEINSCHMIDT (BERLIN).

The Doctor treated in 1883 twenty-two cases of diphtheria (thirteen children, nine adults). Five cases were complicated with scarlatina and one with croup, and in two of these complicated cases he found the children in a moribund state at his first visit. All others recovered after three to six days, in some two weeks were needed. He used in ten cases Apis 3 dec. and Merc. cyan. 3 dec. a dose every half to one hour, supported by warm cataplasmata and gargarisma of Spir. vin. in water. In two cases he used Apis 15 cent. every two hours successfully, in all others Merc. cyan. 4—6 dec. A trial with Merc. cyan. 15 was not satisfactory, as the removal of the deposits took more time, and a slight paralysis of the velum followed.

### OBSERVATIONS OF DR. FISCHER (BERLIN).

Fischer relies on Apis 3, globules dissolved in water, a teaspoonful every 1, 2, 3 hours, according to the severity of the case, and is satisfied with his success in diphtheria. No other remedy, no local applications.

### OBSERVATIONS OF DR. TRÄGER (POTSDAM).

Seventy-two cases during 1883. Cured all except five cases, where croup complicated the disease. Average duration, four days. Treatment: Merc. cyan. 5 dec. dil. (prepared with Spir. vin. rectificatus), five drops, pure,

every two hours, and no difference made according to age. In complications, once Hepar successfully. • Brom. 3 and Merc. bifod. failed.

OBSERVATIONS OF DR. WINDELBAND (BERLIN).

One hundred and ninety-four cases are given, and then the following epiorisis.

When we look over all the cases, some might feel astonished that I never give one remedy alone, but always Apis and Merc. bician., or Bellad. and Mercur., in alternation. I acknowledge this to be a bad practice, as we thus never learn the action of the single remedy, but in such a treacherous disease I have not the courage to rely on one drug; and I observed for a number of years satisfactory results from the alternation of Apis and Merc. bician., results never observed from either one, singly given. Of all complications croup is most to be dreaded. Of my nine cases tracheotomy was performed in one, but too late, through the obstinacy of the mother, and failed. Though four cases of croup were cured, still such a result leaves much to be desired. In other nine cases there were complications with scarlatina, and all recovered without any sequelæ. I lost seven cases out of 194, about 3.6 per cent., a satisfactory result, especially as I can positively aver that every one of these cases was undoubted true diphtheria. I treated lots of cases of angina with follicular deposits, none of these belong to diphtheria, and are, therefore, justly omitted. All my cases showed the grey, greenish-yellow, or dirty red deposit of true diphtheria, mostly with foul odor, and nearly always considerable malaise, especially fever. Local treatment, except gargling with diluted red wine or diluted alcohol, was never employed. The chief remedies were Apis 3 and Merc. bician. 3, in cases of collapse, Arsen. 3, in croup, Iod. 2, Brom. 3 and Hepar sulf. calc. 2.

Let us quote again some of Dr. Windelband's severe cases.

L., æt. 2. severe case, high temperature, general malaise, large glandular swellings. Ten days after she felt well again, a severe relapse. No albumen in urine. Apis and Merc. bician. cured her of both attacks.

• Lady, æt. 32, very sick, high fever, great swelling of glands. No albuminuria. Same treatment, well in five days.

Willy, æt. 7. Under same treatment diphtheria ran a regular course, but a considerable swelling of the submaxillary gland and an otitis media, with rupture of the pns through the tympanum, followed. Cured by Hepar in 8 to 10 days, leaving no disturbance of hearing. Several similar cases are recorded.

A lady, æt. 38. severe case, high fever, greyish-slaty deposits, with unbearable fetor ex ore and great prostration. Cured in five days.

A girl, æt. 5. On the fourth day high fever, dirty, slaty, foul deposits, extreme prostration, fainting, threatening collapse. At first, Apis and Merc. bician., finally, recovery under Arsen.

A girl, æt. 10, had been treated by the doctor since her fifth year 23 times for genuine diphtheria, once in complication with scarlatina, and the same treatment was always successful.

G. æt. 3. miserable case; the whole fauces covered with soft, green, foul-smelling deposit; during the first two days high fever (above 42°), and then a fall to 37.5. On the fourth day, rough, croupy cough and rapid development of laryngeal croup; on the fifth day, pneumonia on the right side, without dyspnoea. Death set in on the seventh day from paralysis of the heart. Treatment: Apis. 3, Merc. bician. 3, Iod. 3, Brom. 2, Arsen. 3.

D., æt. 9.: severe case, with grey, foul deposits and high fever. Exhausting epistaxis required energetic doses of liquor ferri sesquichlorati and, finally, Arsen. 3 on account of the weakened heart.

K., æt. 3½. Two sisters succumbed under other treatment to ichorous diphtheria, with paralysis of the heart. High fever of 41.5° from the beginning, stinking ichorous deposits, nose so full that she must keep her mouth open to breathe. Croup on the fourth day, though deposits are less, frequent attacks of stenosis and of want of breathing during which she often coughed up large pieces of membranes. On the fifth day danger nearly over, though hoarseness remains for a few weeks. Treatment. Apis 3 and Merc. cyan 3, for the croup, Iod. 3, Brom 3, Hepar 3.

The doctor's three children were simultaneously attacked with severe diphtheria. It began with high temperature, 41.4°, and ichorous foul-smelling deposits were spread over fauces, tonsils, cheeks, even the gums were covered with that slaty deposit. Dangerous epistaxis in the boy, followed by the symptoms of weakened heart. Merc. cyan. was given first in alternation with Apis, and then with Arsen. Plenty of wine kept their strength up, and they were ordered to gargle with it. No other local treatment. In one of the children a paralysis of the velum remained for weeks, which gradually yielded to Phosphor. Though they all recovered, it took them a long time to recover their pristine vigor.

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Two hundred and seventy-five cases treated by four physicians during 1883, with a death rate of 6.5 per cent. Windelband treated 194 cases, with a death rate of 3.6 per cent. All five physicians relied successfully on very few drugs, and they may be proud of their success, but as the mortality of diphtheria varies greatly in different epidemics, the rate of mortality for a single year cannot be taken as a basis, though enough cases which might be classed among septic ones, are recorded, which stamp this Berlin epidemic as not a light one. We prefer Windelband's statement, as his cases are spread out over several years. We are grateful that these statistics prove diphtheria to be in a majority of cases not only a curable disease, but that for the treatment of even severe cases, seven remedies, at the very utmost, are the whole necessary armamentarium, viz Apis, 3, Mercur. cyanatus, 3, Iod. 3, Brom. 2, Hepar. 3, Arsen. 3, and Phosphor., 6. That is all, you need not trouble yourself to study and individualize cases; as the disease is specific, so also is the treatment specific.

Is it homœopathic? Yes or no! Just as you take a stand in the definition of the word Homœopathy. The remedies are certainly similar to the symptoms found in diphtheria, but in strictness they fail to be classed under homœopathic treatment, and it may rather be considered eclectic treatment— but success can be claimed for such quasi-homœopathic treatment, and if our Hahnemannian friends deny its homœopathicity, well then it shows as clearly as it is possible, that even in drug treatment there must be other laws at work to remove the disease and to restore health. We really would wish they would help us out of this dilemma, for we acknowledge that we hate generalization in disease, and still this germ-theory is a something which needs elucidation in regard to homœopathic treatment. We need another Hahnemann to clear up these doubtful spots, and if we can fight this battle with a few drugs successfully, what is the use of individualization? Or shall we grieve with McNeil, that this germ-theory has been productive of so much evil, as the cause of much routine and fallacious treatment, and that it is nothing but an unreliable hypothesis? Are the bacteria cause or effect, is not so much the question as how can we heal our patients, be it diphtheria or cholera, and restore them to their former health? If Hahnemann taught that Camphor, Arsenic, Cuprum or Veratrum album suffice for the cure of bacterial Asiatic cholera, have not these Berlin physicians the same right to demonstrate that their

few remedies suffice for the cure of bacterial diphtheritis? These are becoming questions, and they must be met and answered.

We saw that their chief reliance was on *Apis mel.*, Cyanuret of mercury and Arsenicum, remedies which all of us have used many a time where a poison tries to overpower the *vis vitalis*, and where putrescence is the sequela of the local death of tissues. Oehme (N. A. J. of H., XXV, p. 44), recommends *Apis* highly where diphtheria appeared during scarlet fever, and this seemed to have been the case in the Berlin epidemic of 1883. McNeil (Prize Essay, 112) considers it indicated where great debility characterizes the case even from the onset, great anxiety and restlessness, stupor with muttering delirium, puffiness and bloatedness of the subcutaneous tissue of the neck and face; scantiness of urine or excessive albuminous urine, thirstlessness, and with these constitutional symptoms the local ones: tonsils studded with numerous, deep, angry-looking ulcerations, exuding a scanty, fetid discharge; small amount of pain accompanying intense and extensive inflammation; deglutition painful and extending to the ears; heart very leasant.

Cyan mer we only need analyze and we find the foudroyante action of Prussic acid showing great similarity with the fatal action of the snake-poison, and like the latter, its effects are rapid and recovery slow. Mercury, especially the corrosive one, is known that even in small quantities it produces a sepsis, and where putrefying bacteria nestled themselves, they are destroyed by its antiseptic action. *Mercurius cyanatus* is  $\text{Hg Cy}_2$ , or  $\text{Hg}(\text{CN})_2$  and *Mercurius corrosivus*  $\text{Hg}(\text{Cl})_2$ , so that we may claim for both antibacterial power, the former only more dangerous on account of its other component part, the Prussic acid.

Some of the Berlin physicians even used the corrosive mercury in preference. Dittich (A. H. Z., 85), considers it the right medicine in the second or third titration (we prefer to dissolve one gram of the crude drug in four ounces distilled water, and make from that our lower dilutions with water, using alcohol after the fourth potency), when the exudate covers the entire fauces and extends into the nose, from which a profuse discharge flows, rapid destruction of parts, but like all the mercurials, excepting the cyanuret, it is destitute of the prostration and the profound affection of the fluids which characterizes diphtheria, especially of the malignant form (McNeil, 129).

Though the necrosis of the parts finds a simile in the Mercurials, the irritation of the cerebro-spinal nervous system, finally leading to paralysis, especially of the heart, is wanting, but finds itself well represented in Prussic acid, and the combination of the two in the Cyanate of mercury was, therefore, a happy thought, and clinical experience of both schools has attested to its cumulative value. Whether there is already an exudation or not, is of very little moment, the threatening adynamia of the disease remains its chief indication, before adynamia or local death of the affected parts gains preponderance, and Viller's (Oehme, N. A. J., l. c.) found it equally effective as a prophylactic, though he used only the thirtieth centesimal potency, and our Berlin physicians testify to its value at an early stage of the disease, as it prevents the poison from spreading itself or to destroy. McNeil gives the following indications in the fully developed disease: "Putrid diphtheria beginning in the nasal cavities and extending all over the mouth, fauces, pharynx and larynx, which are covered with a greyish, leathery exudation and ulceration; incessant salivation; fetor oris; laryngo-tracheal whistling; voice extinguished; frequently the exudate is in places where it cannot be seen; gangrene; on the left side of the velum, close to the uvula, loss of substance of about half an inch in diameter, surrounded by a narrow, intensely red rim, the color of which contrast with the purple tint of the neighbouring membrane; the deficiency is

filled with a slaty grey, soft substance, which hangs below the edge of the velum. Engorgement of the parotid and submaxillary gland; excessive prostration; adynamic fever, burning skin; sopor, but when spoken to is easily aroused; suppression of urine or albuminuria."

In his thirty-first lecture, Jousset (English edition, p. 464) speaks of the putrid form of diphtheria, and he considers the Cyanuret of mercury a remedy whose efficacy, in the early stage of the disease, cannot be denied. It is mostly indicated for false membranes, which are thick and putrid, and which occupy the whole throat and extend into the nasal fossæ; for enormous, painful glandular swellings; for palor and shining tumefaction of the face, with very decided adynamia. Ludlam, in a foot-note, quotes Burt: Usually the pseudo-membrane is of a dark grey color which he believes to be the true color indicating this drug. He often met this dark grey colored pseudo-membrane not only covering the tonsils, but the whole of the soft palate, uvula and fauces; extending up to the nares, completely occluding the nares. In another number of cases the deposit was wholly confined to both nostrils, and even in croupal diphtheria, Ludlam and Burt saw recoveries from the drug from the third to the thirtieth attenuation, though probably the sixth attenuation will be a happy medium.

Jousset leads our attention that the improvement may not begin until the fourth day of the treatment, and by persevering with the same remedy the best results may often be gained. If other indications spring up and are very decided, try to meet them with whatever else is indicated, but continue the principal remedy, the remedy for putrid diphtheria, which is the Cyanuret of mercury. Though Ludlam does not fully agree on the point with Jousset, still we see that our Berlin physicians agree with their French confrère, thus Sulzer, when necessary, kept up his alternation of Apis and Merc. cyan. for nearly a week, till recovery took place, and changed only when the croupy dyspnoea limited to other treatment; Burkhard, Træger and Windelband also remained true to the choice of their remedies, and they certainly can be satisfied with their success.

A third remedy, to which our Berlin physicians are partial, is Arsen. alb. McNeil, p. 113, recommends it, "when the membrane is dry looking and wrinkled, and may cover the entire fauces, great fetor from the diphtheritic deposits and oozing of blood from under the elevated portions of the thick membrane; ulcers extending to the roof of the mouth; sensation of a hair in the throat; gangrene, burning in the throat; *great dysphagia*; worse after midnight and from cold; restlessness with the exhaustion and prostration. Oehme, l. c., p. 47, recommends Arsen. when the fever becomes dynamic, when there is great prostration or collapse, etc., and with our Berlin physicians, considers its sphere of action only in a *later* stage of the disease.

Let us study for what late symptoms these physicians found Arsen. useful. It failed in Sulzer's hands (Case 20) when given for a deep gangrenous ulcer on the uvula and velum, and the Cyanide of mercury gave quick relief. Burkhard (Case 45) gave to a girl, given up by her allopathic physician, Arsen. and Merc. cyan. in hourly alternation for the *threatening paralysis of the heart* and filiform pulse; there was neither croup nor considerable diphtheritic deposits, and the case was cured in ten days. Træger gave to a child with diphtheritic croup Arsen., when it was in articulo mortis, and naturally without benefit, for it was not indicated. Windelband (Case 62) found on the fourth day of the disease the girl with *high fever*, dirty, slaty looking, foul deposits, great adynamia *threatening paralysis of the heart, fainting fits and threatening collapse*. After the failure of Apis and Merc. bician. he saved the child by the steady use of Arsen. Case 108 was also a most dangerous case. The entire fauces covered with

a dirty, gluey, green, foul deposit, during the first two days *high fever up to 41°*, then a fall of temperature to 37.5; on the fourth day croupy cough and rapid development of laryngeal croup, on the fifth day pneumonia on the right side. As there was not a full stenosis, tracheotomy was kept back, being at that moment too dangerous. Without the least dyspnoea death set in from *paralysis of the heart*. The treatment was Apis 3 and Merc. bician. 3 then Iodum 3, Bromium 2 and finally Arsen. 3.

110 and 111. Two brothers with *high fever* and the entire fauces covered with slaty, foul deposits. Severe epistaxis in 110, requiring energetic doses of liquor ferri sesquichlorati, followed by threatening weakness of the heart, but rescued from death by Arsen. 3.

121. A light case, but *strong palpitations of the heart and fits of anguish* cured by Arsen. 3.

122. Severe case, *high fever*, glandular swellings, *weak heart, fits of anguish, collapse*, plenty of wine (Tokay, strong Bordeaux) and Arsen. 3.

129. Severe case, *high fever from the start*, foul, greenish deposits; after three days the fever decreases, but *decided weakness of the heart*, needing Arsen. 3 for its removal.

164. Severe case. For seven days *long-continued high fever*, causing great adynamia and *threatening cardiac paralysis*. Apis 3, Merc. bician. 3, Arsen. 3.

We find in the *Guiding Symptoms*, II, 67, under Arsen.: heart-beats are irritable; trembling, irregular motion of the heart; palpitation of heart with anguish, cannot lie on back, worse by going up stairs: severe paroxysms of palpitation or attacks of syncope; quick, trembling, filiform pulse; pulse hardly to be felt, with cold limbs.

Even the old school (Wood, Ruger, Phillips, Fordyce Barker, etc.) acknowledge Arsen. to be one of the most efficient nerve-tonics, when a sense of depression and exhaustion are prominent symptoms.

How different again as a heart-tonic is Phosphor. from Arsen. ! It is the long-fever which indicates Phosphor. : and Kafka (1, 205), shows us the stage : "When the pneumonia had already lasted some time, the infiltration considerable, but the fever not now very high and already remitting, when the patient looks pale, weak and collapsed, when the sputum is still tough and cannot be expectorated, when diarrhoea weakens the patient and adynamia threatens to extinguish life. Here Phosphor. becomes the great analepticum, strengthening the *vis vitalis*, rousing up the sunken reactive power and leading the lungs from their oppressive weight, gives the heart strength again and prevents that paralytic state, which Jurgensen so much fears as the cause of sometimes sudden death in pneumonia. Just like Arsen., so also Phosphor. comes in late, but where not too late, performs the work promptly.

Neither McNeil nor Morgau mentions Phosphor. in the treatment of diphtheria. Oehme quotes Trink, who praises it in that disease where the adynamic character shows itself early, the strength fails rapidly and paralysis of the heart threatens, but here we would add the proviso : that the disease extended down the respiratory organs, producing a broncho-pneumonia, here of a septic character, oxygenation becomes more and more deficient, hence threatened paralysis of the lungs as well as of the heart with prostration, viscid sweat, small pulse, sunken face, rattling in the windpipe and exitus lethalis. Buchner hints to this venous stagnation with dilatation of the right heart, or fatty degeneration, in his work on morbus Brightii, for which he considers Phosphor. the cardinal remedy, whereas our Arsen. attacks more the arterial weakness of the left overworked heart, and by vitalizing the exhausted nerve force restores equilibrium, so that a restitution may still be possible.

Our Berlin physicians hardly ever prescribed Phosphor. in their cases of pneumonia diphtheritica, they relied far more on Iodum, Bromium, and

Hepar, which they found to have saved at least some of their cases of diphtheritic croup. In fact, that word croup is misleading, as in bacterial, corroding, septic diphtheria the whole morbid state differs so totally from a purely exudative inflammation.

When we consider with Jousset (*l. c.*, 466) that the dyspnoea and suffocation in this so-called diphtheritic croup arises not so much from the mechanical obstacle, from the presence of the membranes and the spasm of the glottis, than from the premature and untimely paralysis of the muscles of the glottis and of the diaphragm, we are astonished that not more children succumb to this malignant factor. Prof Jacoby (*Diphtheria* p. 77) is of the same opinion, saying: "fever and pain are not necessarily prominent symptoms." In fact, they are frequently unimportant, but in proportion as the degree of narrowing of the larynx increases, the respiration becomes more difficult, long-drawn and loud, in the place of hoarseness. There is complete aphonia (query: from paralysis of the vocal chords?), and the hoarse, loud, barking, croupy cough becomes more husky and suppressed, without losing all of its croupy character."

Monti in his classical work, *Croup and Diphtheritis*, defines laryngitis diphtheritica as a diphtheria of the tissues. Here not only the epithelium and the capillaries of the mucous membrane become changed, but the whole tissue of the mucous membrane, its submucosa and the corresponding blood vessels, are diseased, leading to necrosis. It is always a secondary process, and develops itself always in consequence of a preceding diphtheritic process in another mucous membrane. The younger the patient, the greater the tendency of the diphtheritis to extend itself to the larynx, and moist damp dwellings and cellars favor such a spread downwards.

Like any other kind of diphtheria, we must differentiate between the milder forms where diphtheritic laryngitis is part and parcel of a local diphtheritis of another mucous membrane, mostly of the fauces, more rarely of the nares and the mouth; or 2, where the whole case, including the laryngeal affection, shows clearly symptoms of blood-poisoning; or, 3, the septicæmic form of diphtheritis.

Thus we can easily understand why in an uncomplicated laryngitis diphtheritica such remedies as Iodum, Bromium, Spongia, and Hepar succeeded, and why they failed in the second and third form, where we have to deal with blood-poisoning and septicæmia, and where the snake-poisons will still triumph over the insidious enemy, and why the latter were so much neglected by the Berlin physicians remains a mystery.

Kafka's (*Hom. Therapie*, I) great remedy in genuine croupous affections is Iodum. Thus he says, p. 94: We may be certain that where Phosphor. fails to bring relief in a broncho-pneumonia, we have to deal with croup. Phosphor. acts with certainty in albuminous, gluey, pneumonic exudation, as long as in consequence of the dyspnoea, and of the disturbed circulation there are not any symptoms of blood intoxication by carbonic acid poisoning. But where no improvement follows in a few hours, we may rely upon that we have before us a croupous broncho-pneumonia, and Iodum is to the croupous (fibrinous) exudation what Phosphor. is to the albuminous one. Thus also in laryngeal croup (p. 47) Iodum must take the place of the usual remedies, as soon as laryngo-stenosis takes place, when with every inspiration the epigastrium and the intercostal spaces are drawn in, when the cough becomes rare and without timbre, and the poor child labors hard not to suffocate; but when the vital power seems to wane, we have still in Phosphor. a tonic, which may tide us over the paroxysm and save the child.

Hughes (*Pharmacodynamics*, 554) reports that Elb, as soon as he was satisfied of the existence of true croup, gives a dose of Iodum up to the 6th, and "like the sudden subsidence of a storm, so wonderfully quick is its action. The anxiety and imminent suffocation, and whistling cough,

cease as if by magic, and the dyspnoea becomes so much diminished, that Acon., given an hour later, speedily procures remission of the fever, with perspiration. (In our own practice we have verified this action of Iodum in true fibrinous exudation of croup, but failed to see any benefit in malignant diphtheria from its local and internal use.)

Dr. Mayhoffer suggests Bromine for the constitutional prostration in croup, and thinks it may be thus suited to diphtheritic croup, while Iodum suits more the sporadic and sthenic form.

Oehme (*l. c.*, 54) gives as his reason for the use of Bromine in diphtheritis rests on three points. 1. that it destroys fungous growth; 2. that diphtheritis, spreading to the larynx, produces symptoms similar to croup; and 3, that Bromine is an important croup remedy, and then asks: how can one and the same remedy answer to a sthenic and asthenic disease, to a plastic disease, and one whose tendency from the onset is decay, exhaustion, paralysis? (In the few cases of diphtheritic croup, where we tried inhalations of Bromine as a last resort, it failed in our hands, though we had saved with the same inhalations the lives of children, suffering from sthenic fibrinous croup.) In Monti's first class of laryngitis diphtheritica, severe enough in every sense, but yielding to treatment, such croupous remedies will remove the stenosis, but they will fail entirely where adynamia prevails nearly from the start.

Jousset (*l. c.*, p. 476) says The *Materia Medica* is rich in the number of its remedies for syncope; the most important of them are the animal poisons, for serpent wounds induce a condition of fainting, and even death, by syncope. Lachesis, Crotalus, Naja, Vipera, and Apis mellifica, may, therefore, be indicated; but before clinical observation has taught us which of these is the most reliable in diphtheritic syncope, I fear we shall lose many more cases from this cause.

Dunham (*Lectures*, II. 408) says. Lachesis, in common with other serpent poisons, produces 1. direct weakness of the heart's action, 2. weakened respiration and difficult deglutition, 3. an incoagulable condition of the blood, and as Mitchell proved by experiment with Crot. ven., actual disorganization of the muscular tissue. Locally it produces gangrene. The throat action begins, according to Lappe, on the left side and extends to the ear, accompanied by tightness in the larynx. Internally, deep red, or purple; externally as though the cellular tissue were infiltrated; external tenderness. From this we may have 1. death from syncope or suffocation; 2. ecchymoses, and death from blood disorder; 3. local gangrene. (Vol. III, p. 255. We cannot help quoting this beautiful differentiation.) In all the cases mentioned there was great prostration, as manifested by loss of muscular power, slowness and softness of pulse, stupid delirium, etc. In this respect the cases resembled those in which Arsen. is indicated, and has so often proved curative. These cases, however, did not present that vascular and nervous erethism conjoined with prostration, which is so characteristic of Arsen. Nor, on the other hand, was the asthenia so complete as to call for Carb. veg. Laches. may, perhaps, be held, in so far as the symptoms of asthenia are concerned, to occupy an intermediate position between Arsen. and Carb. veg.

Now let us quote Oehme (*l. c.*, 73) again: *Subjective symptoms much severer than the objective*; violent pain in throat; extremely painful and difficult swallowing and speaking; sensation of a foreign body in the throat (Hepar), with stinging extending into the ear; urgency to swallow, and desire to hawk up something, with choking spells; dislike to have the throat touched; exudate begins or is worse on left side; voice weak or hoarse; aphonia; cough causes pain; foetor oris; fetid discharge from mouth and nose; violent prostration even before the exudation; lassitude, weakness; pulse weak, small; perspiration cold, clammy; somnolency; delirium; symptoms worse after sleep.

## Treatment of Diphtheria.

Farrington gives a most excellent lecture on Laches, in the *Hahnemannian*, of November, 1884, which deserves thorough study. He says: You may divide the effects of the snake poisons into three sorts. 1. that which may be compared to the action of a stroke of lightning, or a dose of Prussic acid. Immediately after the bite, the patient starts up with a look of anguish on the face, and then drops dead (every one has witnessed such terrible cases in scarlatina, diphtheria, etc.); 2. the part bitten swells and turns, not a bright red, but rapidly to a dark, purplish color, the blood becomes fluid, and the patient exhibits symptoms like those characteristic of septicæmia. *The heart increases in rapidity, but lessens in tone and strength.* The patient becomes prostrated, and covered with a cold, clammy sweat. Dark spots appear on the body—the patient becomes depressed from weakness of the nervous system, or from poverty of the blood (or from both simultaneously), and then sinks into a typhoid state and dies. Nerves especially affected by the snake poisons, seem to be pneumogastric and the accessory; consequently we find, as eminently characteristic, symptoms of the larynx, of the respiration, and of the heart. All of them cause a choking, constrictive sensation, coming from irritation of the pneumogastric. All of them have dyspnoea and heart symptoms.

I recollect a case where, after partial recovery from a severe attack of diphtheria, the child fell asleep into that sleep which knows no awakening. Now that child might, perhaps, have been saved, if in all our text-books we would not read that misleading symptom "symptoms worse after sleep," when it should be, as Farrington gives it: HE SLEEPS INTO AN AGGRAVATION.

That symptom is not found under Arsen, and we see therefore that Laches may become our sheet-anchor in those cases of exhaustion, threatening paralysis of the heart.

In relation to diphtheria, the symptoms given by this eminent teacher of Materia Medica, deserve our fullest consideration, as Nasal catarrh, watery discharge from the nose, which is often preceded by throbbing headache, worse in left temple and forehead, and better as the coryza *estiblishes itself*; discharge from the nose is thin, sanious and excoriating. The throat is darker red than in the catarrhal state. The membrane is more on the left side, and has an inclination to go from the left to the right. It early develops that gangrenous state which we meet in diphtheria, with the attendant fetid breath, and the increased danger of systemic infection. The tissues surrounding the throat are often infiltrated, so that you have swelling of the glands about the neck, and also of the cellular tissue. The child is drowsy, even though feverish; the heart, though beating more rapidly than natural, is evidently greatly weakened, as shown by the feebleness of the pulse and coolness of the extremities. The diphtheria may travel down the larynx, and Laches still be indicated when we find the patient *arouses from sleep smothering, and has a diphtheritic, croupy cough.* In malignant pustule Laches may be used, but we should accompany the remedy with brandy—an advice too often neglected in diphtheria, and nutrition must be attended to per os or per anum, or both ways. Home-made ice-cream is always palatable, refreshing and nourishing, and nutritive enemata will tide us over the danger of a collapse. Many a child may have succumbed, because the physician puts all his trust in his remedies, and neglects what common sense demands.

And such a grand remedy is neglected by the Berlin physicians, though it must be the *simulimum* to many a case of diphtheria. But is not their chief reliance in mild as well as in severe cases on Apis mel. in alternation with Merc. cyan.? And is not Apis in its action nearly the same as Laches? Let us compare them even superficially, and we will see that every drug has its own individuality well preserved.

The key-note of Apis is oedema; erysipelas with burning, stinging, itching pains, or urticaria in its different idiopathic forms, superficial as

they are, indicate Apis, whereas Laches. shows its debilitating influence, like all serpent poisons, by the decomposition of the blood, and we meet everywhere a loss of vitality, as in low grades of inflammation. In both of them we meet nervous excitement primarily, showing itself in Laches. by loquacious merriment, mental excitability, followed by peevishness, and mental prostration. In Apis irritable nervousness, violence amounting to frenzy are at first observed, to be followed by indifference and absent-mindedness. In both we have low, muttering deliria, but Apis gives us also those sudden shrill screams, which we dread so much in the later stages of meningeal inflammations. If serosity and cedema are characteristic of Apis, we meet in all the snake poisons a more deep-seated inflammation, a cellulitis. But there is nowhere such a wide difference as Apis and Laches. show in diphtheria. Though we find the adynamia characteristic of diphtheria in both, Apis distinguishes itself by the unperceived advent and insidious progress of the disease, evincing itself by the small amount of pain accompanying intense and extensive inflammation; puffy, glossy, varnished appearance of the dirty-grey tough membrane which covers the fauces with the uvula elongated and looking like a sack of water, thirstlessness, painful and scanty urination, heat unpleasant to the patient; burning and stinging in the skin which is sensitive to the lightest touch; numbness and even paralysis of the extremities.

Laches. all over, shows fetor and gangrene, the decomposition of the blood showing itself by epistaxis, debilitating still more by its copiousness; swelling of the cervical glands of the cellular tissue; purple, livid color of the inflamed parts with dull, dry appearance and little superficial swelling; may swallow food with less difficulty than saliva; diphtheritic croup, the child arouses from sleep smothering, and has the ominous cough, prostration and cardiac debility, the constitutional symptoms greater than the local manifestations.

We had lately a case showing the insidious character of the disease, and where for three or four days the diagnosis of the case was not clear to us. A boy, æt. 9, usually enjoying very good health, went to bed apparently well, but during the night awoke frightened from his sleep, jumped out of his bed and screamed "take him away, take him away." After being pacified he went to sleep again, but as after an hour the same scene repeated itself, the doctor was sent for. I found him pale with an anxious expression of the face, complaining of a dull headache. No gastric symptoms were discoverable, there was no nausea, and still he threw up twice mucous water of a bitter taste, the whole coming out with one gush. What caused this brain-trouble was a question, as from every sleep the same scenes repeated themselves for several nights. So far the usual remedies failed. Although a thorough examination of the throat was daily made, only on the fourth day a careful examination revealed slight diphtheritic patches, which soon spread all over the fauces. For several days he had already complained that he could not breathe through his nostrils, and of a small painful pimple just where the upper lip joins the septum narium. Never any difficulty of swallowing, no thirst, though he took lots of milk during the day.

The characteristic nocturnal deliria, the insidious beginning of the disease in the nose, and traveling downwards, and the aggravation from warm drinks hinted only to Lycop., and to no other drug. He received one dose of the two hundredth potency and alcoholized water every two hours, and *pro bono matris* gargling with diluted alcohol. He is fully recovered, and as lively as ever.

Do the few remedies of the Berlin physicians suffice for the cure of every curable case of diphtheria? We doubt it, but it is a consolation to know that so many cases were cured; it encourages the physician in his battle, and hope and faith are great aids in the hands of the physician as well as of the patient.—*The North American Journal of Homœopathy*, Feb. 1885.

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CROTALUS AS A REMEDY.

*(Continued from p. 185, No. 5).*

A comparison of the eye-symptoms of Crotalus, Lachesis and Cobra shows that Lachesis has the largest and Cobra the least number of symptoms yet discovered and recorded. Both Crotalus and Lachesis have pressing pain in the eyeball, felt when moving the eyes (Crot.), aggravated by movement (Lach.). In Crotalus the sensation is as if the orbits were dry, in Lachesis as if they were too small. In both there are painful burning and dryness of the eyes. In Cobra there is pain in the eyeballs, requiring them to be rubbed frequently, which is as much as to say that the pain is somewhat relieved by rubbing. Crotalus and Cobra have both staring eyes, a symptom which is not recorded of Lachesis. In Lachesis reading causes pain in the eyes. In Crotalus there is fading of sight by reading. Crotalus and Cobra have œdema (puffiness) of eyelids, with a marked sensation of heaviness in Cobra. Lachesis has inflammation of the eyelids, especially of the right upper, more particularly of its meibomian glands. Of vision, Cobra has scarcely any symptom worth notice. "Unable to see although his eyes were open," has reference more to the brain, than to the eyes. In Crotalus there is dimness of vision, especially for distant objects. In Lachesis distant vision is clear, near vision indistinct. No

diplopia is recorded of *Lachesis*. In *Crotalus* there is dimness of sight when reading, and as if the letters had a reflection beneath, making them appear double, one half beneath the other; this is very nearly what obtains under *Stramonium*. In *Lachesis* there is observed a halo of bright blue or fiery red around a light, the halo being filled with fiery rays; no such symptom in either *Crotalus* or *Cobra*. In *Lachesis* there is lachrymation as a result of a general catarrh induced by the drug. In *Crotalus* the eyes are red, watery, tearful, with dryness of the throat and violent thirst, probably indicative of a similar catarrhal process. In *Crotalus* the eye shares in the general hæmorrhagic condition developed by the drug. "The eyes weep blood while the gums bleed. Blood issues from eyes, nose, and ears, and with the matter vomited." *Nux vomica* analogises with *Crotalus* in having bleeding from the conjunctiva. The symptom is not recorded of either *Lachesis* or *Cobra*. "Injection of conjunctivæ, with red zone round cornea" is recorded of *Crotalus*, showing that it is capable of inflaming the deep structures of the eye. We have not the same evidence of either *Lachesis* or *Cobra*. Turbidity of the aqueous humor is another remarkable symptom recorded of *Crotalus* alone.

The following cases, in which *Crotalus* effected cures, have been cited by Dr. Hayward: 1. Miss R—, aged 33, very weak and low after much nursing, and the loss of her mother; and some years previously some syphilitic infection with re-vaccination, got her clothes damped, followed by catarrh, which she treated with acon. and dule.; but the eyes remained weak and very red, with mattering and sticking together of the lids; the sight was very weak and there was much photophobia. *Crt.* 6, every 2 hours; and the eyes were well within three days. (*Hayward*.) 2. Periodical pain for more than a week, lasting the whole day, as if the left eye was pulled out; at the same time dimness of sight, can only read large print; left lobe of brain affected. This patient was addicted to drinking and smoking and once had syphilis. Cured with *Crt.* 3 and 6. (*Neidhard*). 3. A neuralgic affection of the eye, with tearing, boring pain, 'as if a cut was made round the eye'; great sensitiveness to candle-light, and the eyes swollen in the morning. Pain in forehead and occiput had preceded the more recent eye pains: .

*Crotalus*  $\frac{3}{4}$  removed the neuralgia in a few days. (*Goulon*). Nunez has advised *Crotalus* in clearing up the vision after keratitis or kerato-iritis; Liebold, in hæmorrhages into the retina, in which it is more likely to be useful than *Lachesis*.

The three serpent venoms under review have illusions of hearing. Cobra has great noise in the ears, as if a mill were going on in the head, on waking in the morning; this is the only ear-symptom of Cobra. A young lady, who was bitten by a *Crotalus*, asked frequently if it were not raining, though the evening was calm and clear. *Lachesis* has illusions of hearing under a great variety of forms: Whizzing as from insects in the ears; thundering in both ears; ringing, roaring, singing, whizzing as from insects in the back part of the head. Sensitiveness to noises is common to both *Crotalus* and *Lachesis*. There is diminution of hearing to the extent of its abolition in both. In *Lachesis* the hearing disappears during the catarrh developed by the drug. In *Crotalus* it seems to be due more to the changes wrought in the nerves. In *Crotalus* there is hæmorrhage from the ears, not so recorded of *Lachesis*. In *Crotalus* there is sensation as if right ear were stopped up, and a drawing in interior of both ears, with heat and a sensation as if ear-wax were passing through Eustachian tubes into mouth. Dr. Hayward has recorded the following case from his own practice: W. G—, aged 7½ years, of weakly constitution and eruptive skin, and whose father died of heart disease and alcoholism, had rather severe scarlatina under domestic treatment, followed by severe otorrhœa, which after three months became sanguinolent and offensive, accompanied by considerable deafness. *Crt.* 6, three times a day, cured within two weeks.

Nasal catarrh, with dry and fluent coryza, is a prominent symptom of *Crotalus*, *Lachesis* and Cobra. There is much sneezing in both *Crotalus* and *Lachesis*, not mentioned of Cobra. The catarrhal symptoms of *Crotalus* are decidedly worse out of doors, and better indoors. This would seem to be the case in Cobra, but we do not find the symptom under *Lachesis*. Under this last drug the nasal catarrh comes on in the afternoon, is fully developed by evening, and disappears by morning. There is bleeding of the nose from *Crotalus* and *Lachesis*. No similar symptom recorded of Cobra. The bleeding under *Crotalus* is

continued, and is the result of the general hæmorrhagic tendency impressed upon the system by the venom. Under Lachesis the blood comes on more often from blowing of the nose, than from simple oozing. So far as recorded pathogenesis goes, none of these venoms seems to have exerted any influence on the sense of smell; though we must confess that it is hard to believe that they have no action in that direction. Dr. Hayward has cured a case of syphilitic ozæna with *Crt.* 6.

The expression of the face in *Crotalus* is either one of calm indifference and apparent freedom from suffering, the lips and cheeks being of normal color; or flushed and excited, or agitated and anxious and pale; in Lachesis, the face is sunken, as if he had been up nights, and indicative of extreme suffering and pain; in Cobra the face is thin and haggard, dark around eyes, expressive of anxiety. The color of the face in *Crotalus* is chalky white, with blue round eyes; or deathly pale; or livid; or purple, almost black; or yellow. In Lachesis it is pale, or earthy gray, or yellow. In Cobra, red, or livid, or greenish yellow, or pale. In both *Crotalus* and Lachesis there is erysipelatous inflammation of the face, with this difference, as gathered from recorded pathogenesis, that in the former notwithstanding the prodigious swelling, the eyes protrude as if shooting from their sockets, in the latter the eyes are closed. In both, the cheeks and lips swell either independently, or from being involved in the general erysipelas. No such symptom recorded of Cobra, in which the lips are dry, painful, excoriated, cracked or are inclined to crack. The breaking out of a large pustule (near left wing of nose) is recorded of *Crotalus*. No such eruptions either under Lachesis or Cobra.

Acne and recurrent erysipelas have been cured by *Crotalus*. Dr. Hayward has recorded the following case of cure of papular eruptions: Miss M——, aged 27, subject to chronic headaches, but most concerned about a copious, red, itching papular eruption on face, especially chin, which has existed for some months since menstruation has been delayed, scanty and dark; and especially since last period, now seven weeks ago. *Crt.* 6, four times a day. The eruption became less red within a few days, and menstruation returned within a week, and was more copious and of a better color. *Crt.* continued three times a day. The

eruption gradually decreased ; and the next menstruation returned at the end of four weeks ; after this the face was soon free of eruption. Dr. Hayward has also put on record under the head of *Distortion of Face*, the following curious and complicated case : Jan. 13, 1883, Miss R——, aged 25, of dirty yellow, bilious appearance, subject to severe bilious headaches every few days, beginning behind left ear and passing round lower forehead as a pressing down on the eyes, attended with nausea and vomiting ; bowels irregular, either diarrhoea or constipation. For years subject to grinding her teeth during sleep at night, so dreadfully that she has broken most of her molars ; she wakes up with it nearly every night, and then finds her face much distorted—the mouth and nose drawn towards left side [Belongs to an epileptic family.] Menstruation always late—6 to 8 weeks' interval—scanty, lasting only three days, dark in color, very painful on beginning. *Crt.* 6, four times a day. Jan. 18—Reports that on third day after beginning the medicine she had an attack of headache, beginning in a small spot behind left ear, and lasting twenty four hours : it was the worst she ever had, so dreadful that she had to remain in bed for 24 hours, and there was much vomiting of greenish mucus ; after this she felt much better ; and last night had very little grinding of the teeth and very little distortion of the face ; but on pressure with finger (now) on left occiput pain shoots over left eye. *Cont. Crt.* Menstruation occurred on Jan. 22, and lasted four days, was less scanty, less dark in color, and much less painful. She had only one attack of headache, and that was very slight and unaccompanied with nausea or vomiting ; she had slept much better, and there had been scarcely any grinding of the teeth, and no distortion of the face. *Cont. Crt.* night and morning. After seven months she reported as having been quite well for the last seven months, and her countenance is much less unhealthy.

All the three serpent venoms we are considering have dryness of the mouth. In all there is increased secretion of saliva, which assumes a foamy character in *Crotalus* and *Cobra*. In *Crotalus* the taste is sour, and remarkably blunted for salt. In *Lachesis* the taste is sweetish, saltish, coppery, and generally described as disgustingly bad and nauseous. In *Cobra* the taste is predominantly sour, occasionally it is bitter, or coppery. The coating

on the tongue in both *Crotalus* and *Cobra* is white or yellow. *Lachesis* is said to have removed such a condition of the tongue. The tongue in *Crotalus* is very markedly swollen and protrudes from the mouth. In *Lachesis* the left half of the tongue becomes swollen; no protrusion noticed. In *Cobra* the swelling of the tongue is not noticed at all. There is numbness of the tongue in both *Crotalus* and *Lachesis*, not in *Cobra*. In *Crotalus* the speech is in whispers, or indistinct and difficult. In *Cobra* it is unintelligible or impossible. In *Lachesis* speech is involuntarily stronger and more distinct than usual. The gums are painful and swollen under the three venoms. They are noted to be hotter than natural under *Cobra*. They bleed under *Lachesis* and *Crotalus*, under *Lachesis* chiefly when rubbed, under *Crotalus* as a result the general hæmorrhagic condition. There is toothache under all. The pain is of a shooting character in the molars in *Crotalus*; of a jerking, tearing, dull sticking in the roots, often extending through the upper jaw to the ear, in *Lachesis*; of a gnawing aching character in *Cobra*. The toothache is periodic in *Lachesis*, not so noted of *Crotalus* and *Cobra*. The toothache is worse when the stomach is empty, in *Cobra*; it is worse after eating, from warm and cold drinks, and after waking from sleep, in *Lachesis*. Under *Lachesis* the carious teeth become remarkably brittle; and the teeth generally feel too long when biting together. Under *Crotalus* the submaxillary, parotid, and all the glands about the head and neck become greatly enlarged, and the jaws become locked. *Crotalus* induces grinding of the teeth.

*Crotalus*, *Lachesis* and *Cobra* have well marked effects on the throat. Dryness of the throat is common to the three venoms. In *Crotalus* the dryness is with either violent thirst or without any. In *Lachesis* the dryness is accompanied with thirst and nausea; at night on waking there is dryness without thirst; the dryness may be confined to the throat and not involve the tongue, and may be so great as to impede swallowing. In *Cobra* the dryness is associated with a feeling of constriction. In *Crotalus* there is a sensation as if the fauces were lined with mucus which had to be swallowed down or hawked up. In *Lachesis* there is much tenacious mucus in the throat, especially at its back part so tenacious that he could scarcely raise it. In *Cobra* there is

accumulation of tough mucus at top of throat. In both *Lachesis* and *Cobra* there is a good deal of hawking of mucus from the throat. There is burning in the throat under *Lachesis*, not so mentioned under *Crotalus* and *Cobra*. There is general inflammation of the throat and tonsils under the action of all the three venoms, but the right side seems to have the preference under *Lachesis*, the left under *Cobra*. *Crotalus* seems to be impartial to all parts. In all there is difficulty of swallowing. This arises from three causes severally or jointly; dryness of throat; perverted innervation of the muscles of deglutition, and inflammatory swelling of the mucous membrane and of the tonsils. The provings of *Cobra* do not seem to have been directed to noting the differential difficulty with respect to solids and liquids. In *Crotalus* difficulty of swallowing liquids in particular is noticed, though not with that fulness which we find in *Lachesis*, under which it is distinctly noted that "liquids cause more difficulty in swallowing than solid food," "difficulty of swallowing saliva, not of food," "constant pain on empty swallowing, not on swallowing food." Tonsillitis is mentioned distinctly under both *Crotalus* and *Cobra*. Under *Cobra* there is a recurrence of the tonsillitis every winter. Though the tonsils are not mentioned by name as suffering from the toxic action of *Lachesis*, yet there is no doubt that they do suffer from that action. The symptom—"the throat seems somewhat swollen, as if two lumps as large as the fists came together" points evidently to the tonsils. Under *Crotalus* there is sensation of swelling and elongation of uvula, not so mentioned under either *Lachesis* or *Cobra*. The throat symptoms of *Crotalus* are better in the day, worse at night; of *Lachesis* are worse morning, evening and day up to noon and always after sleep, whether in the day or at night; of *Cobra* are worse night and morning after rising. Under *Lachesis* the throat is very sensitive to external pressure, can endure nothing tight on it; the same is to some extent the case under *Cobra*; not so mentioned under *Crotalus*.

The following is one of many cases that have occurred in the practice of Dr. Hayward: "Mr. R. D—, aged 27, August 11, 1888, whilst in good health, but weak with over work and anxiety, was exposed during the day to the exhalations of night soil, and was immediately attacked with nausea and headache; in the evening he felt seedy and had a fulness in throat; had a

restless night, and next morning felt very low and weak ; in the afternoon was so weak he could not walk without assistance, and his throat was very painful and headache frightful. Was called to see him, 8.30 p. m. : pulse 120, very small and weak ; skin hot but perspiring ; headache frightful (had a vinegar cloth round it) ; fauces much swollen and dark red all round ; so prostrate he could scarcely raise himself in bed ; very thirsty. Ordered ice to suck, and gave *Crt.* 6, half a drop every hour. Called next morning, expecting to find diphtherial sore throat fully developed, but found him downstairs ; pulse natural, no headache, fauces rather less swollen and red ; still some thirst. He exclaimed : ‘ that was wonderful medicine, doctor.’ *Crt.* continued, every two hours and he returned to his work next day.” In many a case of gangrenous inflammation of the fauces, syphilitic and non-syphilitic, involving the uvula and soft palate, Lachesis has, in our hands, proved the saving remedy. Where the tendency to bleeding is predominant *Crotalus* should take its place.

The œsophageal symptoms of *Crotalus* are stated as follows : “ Scraping rancid sensation from pharynx down to stomach, with pressure in epigastrium ; heart-burn the whole day, especially afternoon, with sensation as if whole œsophagus up to mouth were filled with rancid fluid, with eructation tasting of ingesta.” No symptom is recorded indicative of spasm, and yet as we shall see further on that Dr. Burdick has recorded a case, in which this symptom was present and was removed by *Crotalus*. This shows how imperfect our minute proving of this drug as yet is. Under *Cobra* we have the following symptoms referrible to the œsophagus, “ sensation as of a lump in stomach and upper part of œsophagus, associated with feeling of indigestion ; the stricture of the œsophagus increased so much that nothing could be forced down the throat.” Might not this last symptom have arisen from paralysis of the muscles of deglutition ? Lachesis has “ difficult swallowing of food and drink, as from a hindrance in the region of the cardiac orifice.” This is a genuine symptom as we recently had it in a case of hysteria, but opportunity was not given us of trying the drug, as the case was transferred to a *Kaviraj*.

The purely gastric symptoms recorded of *Crotalus* are few compared with those of Lachesis and even of *Cobra*. It is not a little singular that the word appetite is not used by any of the provers,

though symptoms are recorded which indicate loss of appetite under Crotalus, thus: "nausea with malaise after meals; pressure in stomach and uncomfortable sensation about region of epigastrium, as if he had eaten too much; pain in stomach after breakfast and dinner; in the morning stomach felt sore and tender, worse after food; breakfast lies heavy all day; refused to eat, but drank at frequent intervals." Under Cobra we have "appetite failing, and loss of appetite." Lachesis sharpens the appetite at first, and then destroys it, as the following symptoms show: "Increased appetite; hunger, cannot wait for food; feeling of great hunger in the stomach, as though one had to wait a long time for food; at one time good appetite, at another none at all; great appetite, but after eating he was obliged to lie down; food is relished without real hunger, it was hastily swallowed; diminished appetite; she lost all appetite, especially for bread and rolls; the usual milk causes nausea; yet every thing has a natural taste; all appetite in the morning has disappeared; with good relish for food he takes very little, as though he did not need more; aversion to food, with hunger; longing for neither food, wine or tobacco, though accustomed to wine and tobacco."

With reference to likes and dislikes for, agreement and disagreement of, particular kinds of food and drink, we have only one symptom under Crotalus, "craving for stimulants," noticed by Dr. Hayward, but we are not told whether he satisfied this craving and with what effect. Cobra has the same craving for stimulants, which are said to aggravate the state. But what state we are not distinctly told, whether the craving itself, or the state described immediately previously, namely: "A slight cause sets him in a perfect agony of mental suffering on another's behalf; there is a feeling of depression and lowness about the heart; mind brooding over imaginary troubles." Most probably it is this state of depression that is aggravated by taking stimulants. Hence the generalization made by Dr. Lilienthal that the symptoms of Cobra improve by taking stimulants, is not correct. Under Lachesis there is at first no inclination even for the accustomed wine, then without feeling any exhaustion, there is increased longing for wine which produces less effect than usual. Lachesis has *unusual longing for oysters*, which agree well. Under Lachesis a great smoker, without any actual aversion for it, loses all inclination to smoke.

Eructations are caused by the three venoms. Under *Crotalus* the eructations are rancid the whole afternoon; of sharp, sour fluid after eating white bread. Under *Cobra* the eructations taste like barley water: consist of hot, foul risings of air from stomach. Acidity of stomach is simply noted, but no mention is made if the eructations partake of an acid character. *Lachesis* gives rise to eructations and risings of food after eating; the eructations are very frequent so as almost to suffocate, but are followed by great relief; there are frequent eructations of sour water after dinner; there are also burning eructations of dry air; meat fried in latter causes acid and bitter risings, otherwise the stomach digests well. Under *Crotalus* there is heartburn the whole day, especially afternoon. Under *Lachesis* there is heartburn in the evening after smoking; the heartburn is sometimes attended with headache. No heartburn mentioned under *Cobra*. Nausea and vomiting are common to the three venoms. *Crotalus* has nausea with malaise after meals, increased by standing or walking, relieved by sitting. Along with nausea there is headache and giddiness and anxiety. *Cobra* has nausea all day, especially after breakfast and dinner, which is removed by acid fruit. Walnuts, which agreed well before, give rise to sickness and pain in stomach. *Lachesis* has nausea in the morning; in paroxysms forenoon and afternoon; at night on waking; after dinner, after milk; always after smoking the nausea is very peculiar, as if it were in a single place in the stomach, extremely disagreeable, immediately caused by looking at sugar of milk, even at a globe, and even by the thought of it. The nausea is accompanied by pain in the pit of the stomach, with faintness, with eructations, with vomiting and thirst. *Crotalus* has vomiting with the nausea; the vomiting comes on least exertion; the vomiting is constant, incessant, with insatiable thirst for large quantities. The vomited stuff is either undigested food, or food and mucus, or simply mucus or blood, mixed with greenish, or yellowish green fluid, sometimes very foetid. The vomiting is accompanied with diarrhoea. In *Cobra*, vomiting is simply noted, without mention of its characteristic, except that in one instance it was plentiful. In *Lachesis* there is vomiting at night by paroxysms, violently spasmodic, with diarrhoea; the vomited matter is either only mucus, or blood, or food. There is also spasmodic bilious vomiting. The various abnormal sensations produced in

the stomach by *Crotalus* are : pressure and uncomfortable sensation as if he had eaten too much ; pain in stomach after breakfast and dinner ; stomach sore and tender in the morning, worse after food ; weight on stomach and chest, breakfast lies heavy all day : shootings in pit of stomach ; agonising pain in stomach, with great restlessness ; and stricture at epigastrium. The gastric symptoms of *Crotalus* are removed by stimulants. Cobra produces uneasiness, disagreeable feeling as if loaded, sensation as of a lump, sinking sensation, in stomach ; it produces also great heat in stomach when empty ; griping, pinching, pricking ; pressure as from stones after each meal. Unlike *Crotalus* and Cobra, *Lachesis* has more often a peculiar feeling of emptiness in stomach, and hunger, in the afternoon and at night, though he had eaten well at dinner and supper ; less often there is pressure as of a great load in the stomach after eating, relieved by eructations and emission of flatus, but the pressure continued and is only then relieved by *mercurius*. Under *Lachesis* there are alternations of cold and heat in stomach, with want of breath ; there is also burning in stomach and the hepatic region.

The following cases of disorder of the stomach occurred in Dr. Hayward's practice:—*Vomiting—Gastritis* : Mrs. S—, aged 62, the subject of apoplexy, with cutaneous eruption (suspicious of being old syphilis), and chronic alcoholism, was gradually breaking down ; had no appetite, had constant nausea and vomiting, vomiting even small sips of brandy and toast-water ; she looked a pitiable object. *Crt.* 6, one drop in a teaspoonful of water every two hours, was prescribed. This arrested the nausea and vomiting at once, so that after a few hours she was able to retain milk, and afterwards beef tea ; there was no vomiting after the first dose of *Crotalus*. For three weeks she had no more vomiting, but after that time it returned, and was more or less troublesome until her death, six weeks afterwards. *Rhs.*, *kre.*, and *pho.* afforded marked relief.

*Atonic Dyspepsia.* Mrs. E—, aged 57, had gastritis two years ago, now has been exhausted by nursing sick family ; is debilitated and bloodless, and complains of having suffered for some time with continued dull, heavy, throbbing, occipital headache, and frequent faint, sinking, hungry sensation about epigastrium, with a trembling and fluttering sensation a little lower down above

the umbilicus, followed by flushing of heat over whole body, also extreme weakness. Tongue very red, smooth and polished, and feels swollen; mouth feels foul and sticky on awaking. *Crt.* 6 four times a day. Within a week all the symptoms except the headache had disappeared.

Dr. S. P. BURDICK records the following case of *Spasm of Esophagus*:—Mrs. S—, aged about 30, suffered for many years from a peculiar affection which seemed to be hysterical in origin. About nine years ago she began to have difficulty in swallowing any solid substance. This gradually became worse so that deglutition of any solid substance became quite impossible. Her soup even had to be strained so as to remove all meat fibre and solid particles. During this time she was under the treatment of various physicians, but received no apparent benefit. About five years ago the late Dr. Ad. Reisig treated her with considerable degree of success, so that she could swallow a few semi-solid substances. She, however, relapsed after his death, and so continued until October last when she came under my care. After studying her case closely, I selected *Crotalus* as promising more than any other remedy. She received *Crotalus* 200, and made slow but marked improvement for five months, at which time she was perfectly well. When she came under my care she was greatly emaciated, but she now eats freely of any description of food, and is plump and in excellent health.

As we have them, the abdominal symptoms of *Lachesis* are fuller than those of *Crotalus* and *Cobra*. In compensation for this poverty of symptoms of the latter venoms we have records of the pathological changes wrought by them in the intestines including their peritoneal covering. Thus, "after death, in subacute and chronic cases (of *Crotalus* poisoning), the intestines were found to be congested and ecchymosed, with effusion of serum into the peritoneal cavity, the subperitoneal and intermuscular areolar tissue; and the mucous coat of the small intestine exhibited patches of acute inflammation throughout the whole length, especially the jejunum, and the submucous tissue and the peritoneal covering were engorged, softened and ecchymosed." In similar poisonings with the *Cobra* poison the same extravasations were not observed. It is a pity that from the rarity of the poison, similar experiments could not be made with

**Lachesis.** But why should *Lachesis* continue to be so rare? We trust there is no difficulty in identifying the species. In the interests of the profession there should be no difficulty in procuring it from its habitat, Brazil. It is not a little singular that there should yet be no homœopathic pharmaceutical firms in America or Europe, enterprising enough and zealous enough in the cause of homœopathy to do this service to the reformed system.

Distension of the abdomen is a symptom very predominant in *Lachesis*. "Distension and tearing in the abdomen, with chilliness. Painful distension of the abdomen. Abdomen frequently much distended, as if the internal parts were greatly dilated; with a disagreeable sensation as if the inner parts or ligaments from the stomach were very much stretched." *Cobra* has "swelling in abdomen with feeling of tightness and flatulence." No distension mentioned as such under *Crotalus*. We have only this symptom, "Pressing pain in middle of abdomen, below navel, as if too full there." This is a mere sensation only, and if there had been actual distension, it would certainly have been noted. Sensibility to pressure of clothes upon abdomen is a symptom common to *Crotalus* and *Lachesis*. "Cannot bear the clothes round stomach and below hypochondria, first day," is the symptom of *Crotalus*, and might or might not have been due to distension. Under *Lachesis* the symptom is distinctly referred to distension. "On this account (distension) she was obliged to wear the clothes, especially about the stomach, very loose, otherwise it was very distressing, and even in bed she was obliged to loosen and pull up the night dress to avoid pressure; she dared not lay the arm across the abdomen on account of the pressure." *Cobra* has no such symptom mentioned under it; on the contrary it has "an uncomfortable sense of emptiness at abdominal region, relieved by folding arm over it and pressing." *Lachesis* has a "feeling of emptiness in the abdomen," but not with the relief from pressure.

• Both *Lachesis* and *Cobra* cause much development of flatus in the intestines, which is the real cause of the distension of the abdomen in both. There is much movement of the flatulence in both *Lachesis* and *Cobra*, causing rumbling and gurgling in the abdomen. In *Lachesis* the flatus is passed with much loud noise especially in the morning. Under *Crotalus* there is no mention

of this development of flatulence, though we have no doubt that if provings could be carried on with it with sufficient persistency and minuteness, we would have this symptom with some characteristic difference from the symptom as recorded under *Lachesis* and *Cobra*. Under *Lachesis* we have "a feeling as of incarcerated flatus." *Lachesis* has also "a feeling as if a hernia would protrude," and also "flatulence in a hernia."

The pains developed by *Crotalus* in the abdomen are "burning in epigastrium ceasing after a stool," "violent burning deep in the umbilical region," "pain in left side of abdomen, like a cut through spleen from violent running, aggravated by deep breathing," "shooting pain in the liver," "severe, sharp, shooting, rather burning, repeating at short intervals, apparently starting from left side of womb and passing upwards to region of transverse colon, and there shooting or cutting across, as if from both sides towards centre." The abdominal pains of *Lachesis* are: "pains in the hepatic region," "violent pain in the region of the spleen, while riding in a wagon, obliging him to stretch out straight, which afforded a little relief," "acute pain in the abdomen, as if on the short ribs, worse on inspiration," "sticking in the sides beneath the ribs," "stitches in the left hypochondrium, transient stitches in the hypochondria from right to left," "pain in the umbilical region as from diarrhoea," "pain transversely across the umbilical region, in the morning, immediately after rising," "cutting colic with a burning stool," "cutting and burning colic, with pressure on the bladder," "colic with vomiting of all the food." The abdominal pains of *Cobra* are: "Frequent, sharp, griping pain, with occasional twisting in the umbilical region," "frequent cutting in umbilical region and small of back, followed by sudden and profuse leucorrhoea," "griping pain in the bowels, immediately after dinner, relieved by a large bilious stool," "flatulent colic after being in bed, and before falling asleep."

Clinical experience with *Crotalus* in abdominal diseases has been very limited. In *Jahr's Symptomen Codex* we are told that a case of Ascites arising from blood letting in enlargement of the heart was much benefited by *Crotalus*. The following cases have been reported by Dr. Hayward from his own practice. *Peritoneal Irritation*.—Miss D—, aged 19, a sorter and ripper,

working in a small confined room connected with a dye works, has been in a low state of health for some time, and complaining for some weeks of heat and tenderness of abdomen so that she could scarcely bear her clothes on. Menstruation and action of bowels as usual. Appetite only middling. No fever. *Crt.* 6, five times a day, cured her within a week. *Perityphlitis*.—G. R.—, aged 16, whose father was a *bon vivant* and had liver disease, is a weak, pale, bloodless boy, subject to bronchitis and asthma; after a nervous shock and a period of grief, followed by a chill, was on Saturday evening, July 28th, 1883, attacked with headache, malaise, feverishness, and thirst; these were soon followed by severe pain, and then tenderness in right iliac region, with vomiting, very rapid pulse, and very hot and dry skin. These symptoms continued and grew worse during Sunday and Sunday night, notwithstanding his mother giving him *acon.* 3 and *nux* 3 every hour alternately. Had no sleep Saturday or Sunday night. When visited on Monday forenoon he was found with foul tongue having a red tip, no appetite, extreme thirst, no action of bowels since Friday morning though previously every day; pulse 140, skin hot and dry; extreme pain in region of appendix, with frequent paroxysmal aggravations; great tenderness on pressure in a spot size of small orange, with some feeling of hardness; could not bear right leg straightened, but lay with it kept bent and supported by a pillow. *Acon.* and *bry.* every hour alternately, with nothing more than toast-water and oatmeal gruel. At 9.0 p. m. all the symptoms were found aggravated. *Acon.* and *bry.* ceased, and *Crt.* 6 substituted, a drop every hour. About 12 p. m. he broke out into a profuse perspiration; about 4 a. m. he felt considerably less pain and fell asleep. When seen, 11 a. m. on Tuesday, it was reported that some dark, offensive feces had passed; pulse was 100, no headache, much less thirst, paroxysms of pain only seldom and less severe, still very tender to pressure in ilio-cæcal region. Continue *Crt.* At 8.0 p. m. was found altogether better, can straighten leg without pain. Continue. At 11 a. m. on Wednesday was found with very little to complain of. Pulse 100. *Ars.* 3 every three hours. On second day after this there was some imprudence in diet, and he had a relapse. This was, however, soon subdued with *Crotalus*, and he ultimately made an excellent and complete recovery.

*Jaundice*, hæmorrhagic; September 8th, 1883.—Miss C. T—, aged 7. was stung on upper eyelid by a wasp. Both upper and lower lid, and all around orbit, swelled rapidly and she immediately became sick and faint. Her mother applied a paste of "blue," and administered bellad. 1 every hour. Next morning she appeared better, but had headache and feverishness. When visited on the 12th, was found with foul tongue, thirst, headache, dusky flush on face, yellowness of skin all over, and tenderness of liver, with scanty dark urine, pulse 128. The swelling had disappeared from face, and no mention being made of the sting, it was diagnosed congestion of liver from chill, and hyonia and nux 3 were prescribed. In the evening she became very feverish, headache worse, and much dark hæmorrhage occurred from nose; her mother gave her bellad. 1 again. When visited next day by writer's assistant the hæmorrhage was still frequent and copious, and she was still feverish and yellow. He prescribed bellad. and nux. When seen by the writer the day following, *i. e.* the 14th, more full inquiry elicited the fact of the wasp sting; and, as there were still epistaxis unchecked, dusky flush of face, headache, pulse 130, yellow skin and conjunctivæ, dark urine, tender liver, white stools, and nausea, *Crt.* 6 was prescribed, one drop every two hours. After the first dose there was no more hæmorrhage, and all the other symptoms disappeared rapidly, so that when visited next day she wished to be allowed to leave her bed.

Dr NEIDHARD has reported the following cases.—Mr. B—. *Stitches* in the region of the liver on drawing a long breath, aggravated by pressure. Complete loss of taste, constipation, urine jelly-like and red like blood. Cured by *Crt.* 3. Mrs. T—. Pain in region of liver, also on top of shoulder; pulsation in ascending aorta, nausea on movement, stools white; bilious vomiting every month after menstruation. Cured by *Crt.* 200.

*(To be continued.)*

## FISSURE OF THE ANUS.

This is a disease which, as Ashton has very truly observed, "gives rise to more uneasiness and suffering, in proportion to the pathological condition of the structures involved, than perhaps any other disease to which the human frame is liable."

The disease consists in one or more cracks in the mucous membrane just at the margin of the anus. The skin contiguous to the mucous membrane is often involved. The direction of the fissure is always longitudinal to the rectum and across the sphincter, and its extent is from half an inch to an inch or even more upwards. The fissure generally involves the whole thickness of the mucous membrane only, but it may extend deeper, to the submucous tissues, and even to the muscular fibres of the sphincter. Thus it necessarily varies in depth in different cases.

Women are said to be more subject to this affection than men. But authors are not agreed upon this point. The middle period of life is decidedly more liable to the disease than any other. Dr. Bushe of America has not observed it earlier than eighteen or later than sixty-nine. On the other hand Prof. Miller has seen fissures in children at the breast.

The situation of the fissure is either on the right or the left side of the anus, or on both sides. Its occurrence on the posterior aspect is less frequent, on the anterior aspect the rarest of all. A case is just now in our hands in which the fissure is almost in the median line posteriorly, very slightly towards the left side.

The only disease, with which fissures of the anus may be confounded, is ulcer involving the rectum and anus. But unless the fissures have degenerated into ulcers by long duration and bad treatment, the diagnosis is not likely to be difficult. In an ulcer the solution of continuity of surface is much more extended and irregular than in a fissure in which the surface is just divided by a line. The direction of ulcers is irregular, whereas the direction of fissures, as mentioned above, is invariably longitudinal. We may have narrow and longitudinal ulcers which from the natural contracted state of the anus may simulate fissures. But their character is easily seen when the patient is asked to make an expulsive effort, for then the ulcers are displayed in their whole breadth. By these expulsive efforts the fissure is widened.

ed, but its prismatic form with the base towards the observer and the edge opposite deep in the mucous membrane well seen.

Fissures of the anus are analogous to fissures or cracks in the structures about other dilatable orifices, such as we find in the lips, in the prepuce.

The symptoms, in the very beginning of the disease, are not of a very severe character. They generally occur chiefly during the act of defæcation, and seldom precede or follow it. The pain during defæcation is variously described as smarting, stinging, pricking, burning, lancinating or cutting. The patient feels that the skin about the anus is giving way, and will tell the doctor that it has cracked or been torn. With each repetition of the expulsion of the stool the pains increase in severity and in duration, and in the course of a few days they become unbearable. The pain sometimes begins just at the first urging to stool. During stool they may or may not be very severe, but in the majority of cases they become intolerable after stool, and singularly enough these agonising pains commence sometime, half an hour to an hour, *after* the stool, and may last from half an hour to two, three, four, and even five hours. The persistence of the pain is due to the continued spasmodic contraction of the sphincter muscles of the anus. Burning, aching and throbbing are now predominant, and the pains are no longer confined to the anus but radiate in all directions, chiefly towards the sacrum, round the pelvis, down the thighs, also to the bladder. "In many cases," says Erichsen, "it produces a good deal of continued irritation about the genito-urinary organs; a frequent desire to urinate, tenderness about the prostate, and seminal emissions. \* \* Very commonly in women the pains produced by the rectal disease simulate those occasioned by uterine irritation." The attention of the inexperienced practitioner may therefore be diverted from the real seat of disease. The pains are aggravated, and the anus may become so tender that the pains may be induced, by coughing, sneezing, urinating, indeed by any expiratory or expulsive effort.

The violence of the pains and their persistence long after stool fill the patient with horror at the very thought of their recurrence, and drive them to have recourse to expedients, such as semi-starvation and voluntary postponement of the calls of nature,

which by rendering the stools harder, only aggravate the evil.

Sitting, walking, and riding are painful, and the patient prefers the recumbent posture; and when he has to sit up, he sits on one hip to avoid pressure on the anus.

The spasmodic contraction of the sphincter ani during defæcation causes the stools, even when soft, to be figured and slender; they are longish and of small diameter, so much so at times as to present the appearance of round worms. The stools from the same cause, when the contractions of the sphincter are not uniform all round, are often flattened. The stools are generally streaked with blood and pus.

Fissure of the anus indicates loss of the natural elasticity of the muco-cutaneous lining of the orifice. This cannot be the normal state of things, but must be due to some constitutional taint. Bryant is scarcely right when he says that fissure of the anus "is met with as often in the *healthy* as in the feeble subject." Perhaps he has used the word "*healthy*" simply in contradistinction to "*feeble*," and therefore meaning thereby "*strong*." A patient may be strong, but not healthy.

Fissure of the anus is not necessarily associated with one particular dyscrasia, though we believe it is more often met with in the syphilitic than in other dyscrasias. It may arise from constipation following diarrhoea. It may be induced by sexual excesses. Eczema of the skin of the anus may cause loss of its elasticity and thus predispose to the disease. According to Guernsey it is often an accompaniment of pregnancy. It is often associated with hæmorrhoids. "*Hæmorrhoids*," as Ashton has observed, "are frequently the predisposing cause and a complication of this affection, they narrow the outlet, and by the repeated attacks of inflammation to which they are subject, the surrounding tissue loses its elasticity, and is rendered friable and easily torn or broken." The actual occurrence of the fissure is due to the forcible dilatation of the anus by hard and large fæces. And when once a fissure has occurred it is kept up and prevented from healing by the very cause which has brought it into existence.

A highly irritable condition of the sphincter ani is a very frequent accompaniment of fissure of the anus, and its persistent,

spasmodic contraction after stool is the chief cause of the intense sufferings of the patient. Dr. Robert Harrison, in Todd's *Cyclopædia of Anatomy and Physiology*, says, "it is doubtful whether the contraction is the cause of the fissure, or whether the latter is the cause of the irritable and contracted condition of the muscle. Both explanations," he continues, "may be occasionally correct; but," he adds with strange inconsistency, "it is most probable that the irritable state of the muscle induces the ulcerated fissure, in as much as this muscular contraction occasionally exists without any fissure, and is then equally painful; and fissures frequently exist, as in syphilis, without inducing any spasmodic constriction of the muscle, and accordingly are attended with little or no pain." This only shows that fissure of the anus and an irritable, contracted condition of the sphincter ani may and do often exist independently of each other. It is only the history of the patient in particular cases can tell which is the cause and which the effect. Fissures of the anus in syphilitic patients are not necessarily painless. The patient, who is under our treatment at this moment, is saturated with syphilis and mercury, and yet we have never seen a patient with fissure of the anus suffering such intense pain from spasmodic contraction of the sphincter ani as he has done.

From the severity of the pains induced by the disease, the disturbance of the constitution may be easily imagined. "The countenance," as observed by Erichsen, "becomes pale, anxious, care worn, and the expression is indicative of constant suffering." This is specially the case with those who are already the subject of some dyscrasia.

The treatment of fissure of the anus may be divided into local and constitutional.

Where there is no dyscrasia at the bottom of the disease, the local application of some bland oil, or medicated with tincture of calendula or hydrastis may be enough to cause the fissure to heal up. Where we have a constitutional disease to contend with, as is generally the case, local applications can never suffice, but may be required to soothe the irritation of the local sore, and very often of the patient's mind. For unless something is done to the diseased part itself, very few patients will submit to treatment at all. Nevertheless it must not be forgotten that

constitutional treatment in this apparently purely local disease is all important. With the aid of homœopathic remedies, we may quite dispense with the old school heroic applications of strong nitric acid or nitrate of silver, but, heroic and painful as they may be, we must not forget them, when we have trustworthy reports of cure of fissure of the anus with these local applications, especially when, as it may exceedingly rarely happen, we fail with constitutional treatment alone.

Under local comes the surgical treatment of the disease. M. Boyer of France recommended incision through the fissure down the whole depth of the sphincter ani, and for a long time this was believed to be the only effectual remedy. Mr. Copeland introduced a modification of this operation in England, which was adopted by Sir B. Brodie and Mr. Syme. This modification consisted in limiting the incision to the mucous membrane only, without extending it deeper. By some of the best surgeons even this modified operation is not deemed to be necessary in all cases. "My experience," says Ashton, "fully justifies me in stating that in the majority of recent cases it is not necessary to have recourse to an operation, although some of high authority in the profession assert that incision is the only effectual remedy, and that all sorts of application, soothing and irritating, are unavailing." We must not think too lightly of an operation in obstinate cases when we have the high authority of our own Helmhuth, who says, "of late years I have found surgical management the safest and most speedy." We must not, however, rush to an operation before giving a fair trial to well indicated constitutional remedies.

Forcible dilatation of the anus is another heroic method which has been highly recommended of late by Maisonneuve in France and Pattison in America, and which has been adopted with success by members of our own body. We have Dr. Dudgeon asserting, "I have had several opportunities of testing its value in this distressing disease." Dr. Gilchrist speaks of it in the following terms: "The sufferings are so great that if a reasonable amount of remedies does not produce some marked relief, resort must be had to harsher remedies; and of all that are in common use, I know of none that can equal the method of Pattison, viz., forcible dilatation of the sphincter." The method, though harsh, is

simple, and consists in introducing the two forefingers, of one or both hands into the anus and keeping them there for a couple of minutes or longer. The procedure is painful for the time being, but as it has been found to be followed by permanent relief, we should not neglect it in obstinate cases.

We come now to the constitutional treatment of the disease. With our knowledge of the diathesis of the patient and of the nature and character of the local symptoms, the selection of the suitable remedy will not be difficult. If we seek for drugs which have given rise to actual fissures we shall be disappointed. Only one drug, *plumbum*, and that as contaminating drinking water, is credited with having actually produced fissures as a consequence of obstinate constipation. In *aconitum lycoctonum* we have "after stool, pain in the anus as if there was a crack there." In *allium cepa*, we have "with an evacuation, it seems as if there were cracks on the inside of the anus." But we have a large number of drugs whose rectal and anal symptoms bear a close resemblance to the symptoms we meet with in patients suffering from the disease, and these drugs are often efficacious not only in removing the symptoms but also the disease which has given rise to them. We proceed to point out the indications of the principal remedies.

*Acon. lycoc.* Constipation. The anus feels as if strongly contracted. Whitish stools. After stool, shivering; pain in the anus as if there was a crack there. Itching, tearing at the anus.

*Aesc. h.* Dryness, heat and constriction of rectum, with feeling as if it were filled with sticks. Itching, burning, dull aching, soreness, fulness, cutting of anus. Large and hard stool, passed with great difficulty, followed by severe pains in anus, dull pains in umbilical and hypogastric regions, with very severe back-ache in lower part of lumbar and sacral regions. Stool, black and hard in the first part, of natural consistence but white in the second, followed by severe tearing pains in anus. Painful, burning hæmorrhoids, rarely bleeding. Feeling of dryness and roughness, or even excoriation and constriction of throat.

*Allium Cepa.* Difficult evacuation of fæces; he had to strain much though the stool was not hard. Blood passes with stool. Biting in anus. With an evacuation, sensation as if there were cracks on the inside of the anus.

*Antim. c.* Constipation with difficult expulsion of hard stool. Discharge of mucus, of black blood from the rectum. Pain in the rectum during stool: feeling of soreness, as if an ulcer had been torn open. Burning, itching, smarting of the anus. Stool, first natural, then small and loose, then small and hard, with violent straining in the rectum and anus until all are passed.

*Arsenicum.* During stool, painful contraction directly over anus, towards the small of the back. Burning of the anus for one hour, disappearing after hard and knotty stool. Burning in the rectum after stool, with great weakness and trembling in all the limbs. Burning in anus, worse when walking than when sitting or lying down. The evacuations excoriate the skin about the anus. Painful soreness of the anus when touched. Itching, scraping or smarting pain in the anus. Unnoticed discharge of stool, as if passing wind. Slimy, thin stools having a hacked appearance. Watery blood passes with the stool, and surrounds it. Expulsion of pieces of mucus, accompanied by tenesmus, with cutting in the anus, as of blind hæmorrhoids.

*Aurum.* Margin of anus painfully swollen. Sharp stitches in rectum and anus. Burning heat and tearing pains at the anus. Heat and dull pain at the perineum. Constipation. Very large stool, passed with difficulty. Very hard, knotty stool every day.

*Bell.* Distinct, rapid, severe shootings in rectum during stool. Violent, sudden painful itching in rectum and anus. Violent itching, and at the same time constrictive sensation at the anus. Itching at the anus externally, when walking in the open air. Frequent thin stools with tenesmus; frequent desire for stool, obliging him to go every quarter of an hour. Granular, yellow, somewhat mucous stool. Stools have a sour smell.

Dr. Graham, of Stirling, was the first to employ, in about 1770, belladonna in the shape of an ointment as a local application to relieve the spasm of the sphincter in diseases of the rectum and anus. Sir B. Brodie employed it as a suppository, but he had to abandon it owing to the alarming symptoms it produced in some cases.

*Calc. c.* A pain in the rectum as if it were torn, with stool that is not hard. Burning in the rectum after a copious stool.

Drawing and cutting in the rectum, with a feeling of heat in it, *after* a natural stool. Continued pressure in the rectum, and oppression of breathing, *after* stool. Crawling in the rectum and anus, as from worms; troubles from pin worms. Cramp in the rectum, with griping and sticking, and anxiety, obliging him to walk about. Much loss of blood from anus, *during* stool. Burning in anus, *during* stool. Burning and *dry* sensation in anus. Burning-itching in anus, *after* stool. Drawing cuttings in and about the anus, *after* stool. Constipation increasing from day to day. Frequent passage of stool, at first hard, then pasty, then liquid. Hard stool with mucus, burning when passing. Undigested, hard, *intermitting* stool. White stool, streaked with blood. Offensive stool, like bad eggs.

*Causticum.* Cramp in the rectum, which made it impossible to walk; she was obliged to sit still. Continued pressure in the rectum and anus, worse *after* stool. Stitching in the rectum *during* stool. Burning in the anus *during* and *after* stool, with depressed pulse and palpitation. Excessive itching in the anus, day and night. Crawling in the rectum and anus. Urging to stool, *though the anus is spasmodically contracted*, so that no stool passes; the pressure however continues. After a crumbly stool, the rectum contracted, and then a soft stool, in form like a goose-quill, was passed. Mucus and clear blood with a nodular, difficult stool. Stool passes better *when standing*.

*Graphites.* Swelling about the whole circumference of the anus. Sticking pain in the rectum, *as if every thing were indurated*. Itching and feeling of soreness in anus. Burning in the anus with the stool. Stool very thin, in form like a round worm. White or reddish mucus with stool. Sour-smelling stool, with burning in rectum. Hard, knotty stool, the lumps being united with mucous threads, and even after the stool there is still mucus in the anus. Blood with stool.

Dr. Gilchrist recommends *graphites* for "deep, long and numerous fissures about the anus, no eversion of edges, no inflammation; the fissures look like clean cuts, and are not very sensitive."

*Gratiola.* Tenesmus; painful contraction of the rectum after every stool. Spasmodic contraction in the sphincter ani. Burning at the end of rectum, during and after stool. Throbbing

pain in anus,\* for several days. Itching and crawling in the anus. Hard stool with great exertion.

*Hepar sulph.* Crawling in rectum, as from worms. Burning in anus; feeling of soreness *after* stool. Soft, clay-colored stool passed with great exertion. Blood with stool. No peristaltic action in the large intestines, only a portion of stool can be forced out by the aid of the abdominal muscles.

*Ignatia.* Swelling of the margin of the anus all round, as if the veins were distended. Spasmodic tension in the rectum, the whole day. Pain in rectum as from blind piles, consisting of contraction\* and soreness, lasting from one to two hours *after* stool. Painless contraction, a *kind of stricture*, of the anus, for several days. Contractive pain in anus, *returning at the same hour every day*, painful when walking, especially when standing; not while sitting, with accumulation of stringy saliva in the mouth. Sharp, pressive pain, deep in the rectum, *after* stool. Coarse stitch extending from the anus deep into the rectum. Stool large and difficult to pass. Stool whitish yellow or clay colored. Itching and crawling in rectum, anus, and perinæum. Prolapsus recti, from the slightest exertion at stool. Ineffectual urging and desire for stool, felt mostly in the upper intestines (middle of the abdomen), scarcely in the rectum and anus; the urgency comes on mostly soon after eating. Thread worms crawl out of the anus.

*Lachesis.* Painful, spasmodic contraction of anus, *after* reduction of prolapsus recti. Burning in anus *during* and *after* stool. Spasmodic pains in anus *before* and *after* stool. Obstinate constipation. Hard, nodular stool. After ineffectual urging for several days scanty, soft stool with great pressure, and with pains as if the sphincter would be forcibly pressed asunder.

*Mezereum.* Acute tenesmus, tearing and drawing in anus and perinæum, extending through the whole urethra. *After* stool the anus contracts round the prolapsed rectum which, thus strangulated, becomes sore and painful. Much itching about the anus. Crawling in the anus, as from ascarides, *before* and *after* stool. Excessive urging to stool, a very scanty, soft evacuation, effected only with difficulty and much pressure, *followed* by a distressing sore sensation in the rectum. Stool offensive and sour-smelling. Stool very dark, clay-colored, remarkably devoid of bile. Stool

yellowish-brown, streaked with blood. Discharge of thin blood, bright or dark, *during* and *after* stool. Small, white shining grains in the brown fæces.

*Natrum mur.* Sensation of contraction in the rectum, *during* stool; hard fæces, evacuated with the greatest exertion, causes tearing in the anus, which bleeds and becomes sore; afterwards thin stool; every other day she is constipated. Dragging in the rectum *after* stool. Burning in the anus, *after* stool, hard or soft, especially when vexed. Spasmodic constriction of the anus. The anus seems swollen; the sensation as of a plug sticking in it constantly drove him to stool. Sensation as of needles sticking in the anus, caused by thread worms. Intolerable itching in the anus, that seemed to extend to the bladder and prostate gland. Hard, unsatisfactory stool, evacuated with much pressure and violent pain, as though the rectum would burst, followed by bleeding, and long lasting pain in the rectum.

*Nitric acid.* Itching and scraping in the rectum and anus, with spasmodic constriction of the anus, *during* a stool, *lasting many hours*. With the stool *pain as if something in the rectum would be torn asunder*. Burning in the anus, *during* and *after* stool. Itching in the anus, *after* a stool, especially while walking in the open air. Smarting, more in the rectum than in the anus, immediately *after* a stool. Stool in hard masses; like sheep-dung, with much pressure, and with mucus.

*Nux vom.* Sharp, pressive pain in the rectum, *before* and *after* stool. Sticking pain, with sensation of constriction and contraction in the rectum, *during* stool. *After* stool it seemed as if something remained behind and could not be evacuated, with a sensation of constriction in the rectum, *not in the anus*. Itching in the anus and a hot stool. A burning smarting pain and a sensation in the anus, as if a wound had been cut into *immediately and some hours after* stool. Stool coated with mucus, or mucus and blood. Whitish stool, mixed with tenacious mucus and streaks of blood. Discharge of bright blood with stool. Evacuation of dark-colored mucus that causes biting burning in anus. Stool, *at first* soft, and thin, *afterwards* hard. Constipation, with rush of blood to the head. Stool large, hard, dry. Frequent ineffectual desire for stool after the usual evacuation. Itching in the rectum down to the anus. On going to stool the pressure seems more

upon the uterus (as if a child would pass) than upon the rectum. Worse from exerting the mind. Thread worms.

*Petroleum.* Scales on the margin of the anus, with a tickling smarting sensation. Rectal fistula. Frequent urging to stool, always followed by scanty diarrhœa-like discharge, with much pressure, as if more would follow. Stool evacuated only after much exertion, as if there were not power in the rectum to expel it. Stool difficult to pass, with sore pain in the anus. Burning and sticking in the anus. Violent, smarting stitch, extending from the anus over the ilium to the glans penis. Pressive pain in the rectum before the menses obliging her to bend forward; on assuming the erect position, a sticking in the rectum, worse from walking. Blood, mucus, ascarides with stool.

*Phosphorus.* Violent, constrictive pain, with stitches, in the rectum, before stool. Contraction of the rectum; and with the evacuation of even soft stool, a sharp, biting, sore pain in it extending up into the abdomen, and lasting several hours. Smarting in the rectum during stool that was not hard. Violent burning in the anus and rectum, with great exhaustion, after a soft stool. Frequent sharp scratching and burning in the anus with strong desire to urinate, without discharge of much urine, after stool. Violent pain in anus as if whole body would be torn asunder, with cutting and movements in the abdomen, constant ineffectual desire for stool, heat in the hands and anxiety, relieved by the application of warm clothes. Frightful tenesmus in the anus and rectum for some time after stool. Frequent itching and crawling in the anus, after walking in the open air. Stool hard, covered with mucus, and some blood. Blood passes almost daily with the stool. Discharge of prostatic juice with hard stool. Hard stool, in small lumps.

*Phytolacca.* Neuralgic pain shooting from the anus and the lower part of the rectum along the perineum, to the middle of the penis, followed in a few minutes by a neuralgic pain in the right great toe. Peculiar heat in the rectum, with burning in the stomach. Continual inclination to go to stool, with much straining. Dark, papescient stools, with undigested food in them. Dark, lumpy, hard stool.

*Plumbum.* Anus violently constricted and drawn up. Finger, introduced into the rectum, was forcibly closed upon by the anus.

and the bowel as far as it entered. Burning, cutting in the anus, *during stool*. Constipation increased to such an extent that *fissure of the anus took place*. Evacuations scanty, hard, like sheep dung. Stool tough, indolent, at last streaked with blood. Stool foetid, black, leaden-colored, smooth, sometimes globular. Tenesmus of rectum and bladder.

*Sedum acre*. This is a crassulaceous plant, an irritant emetic and purgative, recommended for fissure of the anus by Dr. Jousset of France. This is how he came to use it: "I have read, in an article on hæmorrhoids," says he, "that the use of the *Sedum telephum* for hæmorrhoids is common in Italy. I knew that this plant, of the same family as the *sedum majus*, was recommended for painful hæmorrhoids, and especially for fissures of the anus. I inquired of Catellan, our pharmacist, if he had the *sedum telephum*, and on his replying that just at that time he had only the *sedum acre*, I took the latter and prescribed it in the third dilution for a man who was suffering from an extremely painful fissure of the anus. The relief was very rapid, and it was followed by his cure, after a few weeks' employment of this remedy. Since then I have continued to prescribe it; and although it is not always successful, yet it has often produced a happy effect in relieving the pains that are incident to fissures of the anus and to hæmorrhoids. The indication for the *sedum acre* is: excessive pain, which is greater *after the stool*, and which may persist for some hours."

*Sepia*. Heat and swelling of the margin of the anus. *Before and during stool*, excessive contractive pain in rectum and anus extending thence into the perinæum and vagina. Pain in rectum *during stool*, and *afterwards for a long time while sitting*. Burning in rectum and anus *during stool*. Severe constriction of sphincter ani preventing stool. Smarting in rectum *after stool*. Stitches in anus *after the morning stool*, lasting until afternoon. Hard stool, small, lumpy, passed with great difficulty. Difficult expulsion of thin, soft, shaped feces. Blood, bloody mucus, or simple mucus, with stool. Protrusion of hæmorrhoids, of the rectum, *during stool*. Burning and itching in the rectum and anus. Discharge of bloody mucus *after stool*. Unsuccessful desire for stool, passes only wind and mucus, with sensation in rectum as if a plug were in it. Ascarides.

*Silecea.* Jerking, almost dull sticking, cutting, stinging in the rectum. Burning, painful stinging itching in the rectum *during* stool. Violent stitches in the rectum, extending towards the genitals, while walking. Constrictive pain in the anus *during* stool. Pressure and burning in the anus *after* stool. Constipation *before* and *during* the menses. Dry, hard, light-colored stools. Very hard, nodular, stools, like clay-stones, evacuated with great effort. Stool scanty, difficult; after great urging and straining until the abdominal muscles became sore, the stool that had already protruded slips back again. Horribly offensive stools. Stool mixed with mucus, or bloody mucus, or blood and mucus, followed by biting, itching in anus. Round worms with the stool.

*Sulphur.* *Before, during and after* stool, burning in rectum and anus. Painful pressure, cutting in rectum, *during* stool. Violent sticking in the rectum even when not at stool, taking away the breath. Throbbing pain in the rectum the whole day, *after* stool. Swelling of the anus with burning itching. Much pressure, burning, tenesmus in the rectum and anus *after* stool, lasting some time, so that she could not bear to sit. Constrictive pain in anus *after* stool. Violent itching in the rectum and anus. Constant bearing down towards the anus. Stool nodular, mixed with mucus. Stool hard, as if burnt. Stool, with sensation as if something still remained, and as if the stool had been insufficient. Blood with stool. Stool covered with mucus. Tape worm. Thread worms. Round worms. Rapid, almost involuntary stool; cannot rise from bed quickly enough. Prolapsus of hæmorrhoids and rectum *during* stool.

*Thuja.* *During* stool, violent pain in the rectum, so that she was obliged to desist. Cutting, jerking and twitching in the rectum *before* stool. The anus became as sensitive *after* a slimy discharge as though the skin were chapped and cracked there. Painful constriction of the anus *with almost every* stool. Violent burning, constant itching in the anus, remained *long after* stool. Evacuation of large, hard, brown balls streaked with blood. Tape worm, ascarides. Frequent dribbling of blood *after* stool. Stools alternately soft and hard, at times like pieces of apple. Condylomatous growths around the anus. Old rectal fistulæ alternately heal up and break out.

## SANITARY HINTS.

BY A. MITRA, L.R.C.P. &amp; S.

## I. COMBINED SYSTEM OF DRAINAGE AND SEWERAGE.

*I. Objects.*

1. To prevent the refuse produced by animal life from polluting the soil, poisoning the air, or tainting the water.

2. To prevent the rain-water or the waste water after our daily use from saturating the soil, for it is a demonstrated fact that dampness of the soil is a fruitful source of such diseases as fevers, consumption, and rheumatic and neuralgic complaints.

*II. Composed of two parts.*

(a.) Main sewers. (b.) House drains.

The main sewers are under the control and management of Municipal bodies, the guardians of Public Health. The house-drains concern the individual occupying each house, and every house-holder should be well acquainted with the details of construction of house drains, both in relation to their connection with the main-sewers and in their internal arrangements; and in the execution of construction or repairs of each work he should not rely entirely on contractors or the cursory and in many instances ignorant supervision of Municipal overseers, but should thoroughly satisfy himself that all points necessary for thorough efficiency and perfect safety have been secured, as he and those near and dear to him are the most affected by them.

*III. Objects to be secured in Construction.*

(1). Efficiency. (2.) Safety.

1. *Efficiency* is secured by the removal of refuse as soon as it is produced, and its removal should be so complete that no part of it may lodge in any part of the drain. For this purpose the drains must have a proper incline or fall, and should be laid upon a bed of well rammed concrete to prevent any disturbance of their position by the sinking of the earth. The inner surface of the drains should also be smooth. Some opening should be provided through which the frequent cleansing of the deposit of debris may be effected, or else the drains will be choked and the flow of refuse impeded.

2. *Safety.* There are two ways in which a badly constructed drain can be a source of danger to the inmates of a house :

(a.) By escape of its contents into the soil and causing its contamination. To avoid this the drains must be made of some thoroughly impervious material and the points of connection of one length of drain with another should be carefully sealed. Insufficiently burnt earthen-ware pipes are porous and very dangerous material for the drains ; contractors are very apt to pass such material, and a dishonest overseer is apt to connive at it. Brick-drains constructed of insufficiently burnt bricks or put together with bad cement are objectionable on the same ground. In order to avoid the risks of accidental escape of drain-contents into the soil no part of the drain should pass beneath the house. If this cannot be avoided, the drain should be encased in good concrete.

(b). Sewer air is another source of danger. It is not in the gases, which the sewer air contains, that the chief danger lies. Together with the generally deleterious gases, sewer air contains putrefactive germs, spores of fungi and germs of specific diseases. In the case of some diseases it has been proved over and over again, that under certain conditions not yet accurately understood, the discharges of persons suffering from them are poisonous in a high degree, and are capable of not only infecting water or milk and thus communicating the disease to those who drink it, but of giving off emanations which will produce the same disease among those who inhaled them. In the case of others the same has been found probable and the long list of ailments, known as belonging to the zymotic class, are probably capable of being caused by sewer air only if the subsidiary conditions of their dissemination exist. The arrangements inside the drains therefore must be so that sewer air may not only not be able to form and accumulate, but that it may not come either from the main sewer or the house drains, when formed there, to vitiate the air of our houses, nor to pollute our drinking water. To avoid the dangers from sewer air, the air from the main sewer should be prevented from passing into the house-drain by putting a syphon-trap before the latter enters the former and the air from the drain should be prevented from passing into the house by means of another trap before it opens into the water-closet. The house drain thus closed at both ends by water-traps may be supposed to be perfectly safe from all danger from sewer-air. But practi-

cally it is not so; for the thus sealed drain will be filled with sewer-gas, and when water is thrown into the closet the air from the drain has a tendency to bubble up into the water-closet to make room for the water, and the water in the trap in such a case goes down with the water poured in and the trap is left empty for a time. To obviate this as well as to oxydize any sewer gas which may form in the house-drain, free ventilation of the drain should be secured.

Ventilation. An inlet for air on the inner side of the outer trap, and an outlet on the outer side of the inner trap, should be provided. In large houses a disconnecting man hole would be very suitable as it would facilitate the cleansing of the drain also. With the two traps and a thorough ventilation the house-drain will be as safe as it can possibly be made. The pipes from bath-houses, washing places and sinks should not have direct communication with the drains, but a space of air should intervene between the pipe and a trapped opening in the drain. It should also be made a rule to pass soil pipes outside the walls and never through a flue in the wall.

#### *Sub-soil drainage.*

Even with a properly planned system of surface drains, unless the compound or courtyard is paved, the ground will absorb a large quantity of rain-water before it can pass into the drain openings. Much of it is absorbed in the small courtyards of Calcutta houses, and the sub-soil of Calcutta being completely saturated with filth of ages, the presence of this moisture gives rise to so much malarious remittent fever with typhoid symptoms. To mitigate the prevalence of this disease the sub-soil of every house should be drained by regular subsoil-drains and passed on to the house drain.

#### *Purity of drinking water.*

To prevent the sewer air from contaminating the drinking water the following precautions should be taken.\*

\* The Editor of this *Journal* was the first to draw attention to this source of contamination of drinking water. In his speech from the chair, after the delivery of the lecture on *Drainage and preventible Disease in Calcutta*, by THOMAS JONES Esq., Barrister-at-Law, Judge of the Court of Small Causes, Calcutta, Dr. Sircar made the following observations anent this subject: "Our water-supply from daily examinations is shown to be the purest in the world."

1. No water tap should be placed immediately over any drain opening.

(2). The water for flushing the water-closet or privy, if supplied from the drinking water main, should not be derived directly by a pipe opening over the water-closet or the privy, as during intermission, poisonous gases are apt to be sucked into the water main and thus pollute a whole branch supply.

(3). When water is supplied from a tank, it should not be derived from the same tank that supplies the drinking water, but a separate tank should be put up for the water-closet or the privy.

But I have observed a fact which leads me to believe that there are local sources of contamination which are scarcely suspected by our authorities. I dare say, most of you have heard the musical sounds emitted by our taps when the pumps at the engine-house cease from their labor. This, Gentlemen, means indraught of air into the pipes, and as some of these taps are very close to the gratings that lead into the drains, you can easily imagine how not only air but sewer gas, with it must enter the water-pipes. Most of the house connections were made at a time when we had only the supply of filtered water, and it is easily seen how the obnoxious gases of privies must daily twice enter the water-pipes through the taps in them. The public urinals, which are supplied with perforated branch-pipes from the mains in the streets for cleansing them, are another fertile source of contamination which must not be forgotten.—*Ed., Cal. J. M.*

**REVIEW.**

*The Knowledge of the Physician.* A Course of Lectures delivered at the Boston University School of Medicine, May 1884. By Richard Hughes, M.D. Otis Clapp and Son, Boston, 1884. .

(Continued from p. 191, No. 5.)

WE have seen that in calling life a property, Dr. Hughes has virtually admitted that it is force, for a property of matter is in reality, in essence, nothing but a force, indeed cannot be anything but force. Varying the expression Dr. Hughes says, "vitality is the living matter's capability of response to the natural stimuli; and the life of each individual is that response on its part, conditioned by its own special constitution." Now this capability of response to external stimuli is the same as the capability of a magnetic body to approach or attract a magnet, as the capability of hydrogen to unite with oxygen to form water, as the capability of compound bodies to be resolved into their components under the influence of the actinic rays of light, of high temperature, or of an electric current. In each and all these cases these capabilities represent the tendencies of certain forces to act in a certain way under the influence of certain other forces, and the mutual action would be the actual response. Life, therefore, is the manifestation of the forces inherent in a certain arrangement of matter, called a living organism, under the influence, or better, in the presence, of certain other forces external to the organism. This manifestation being of the nature, or rather having the appearance, of intelligent regulation and co-ordination of the forces themselves, subserving a definite purpose, philosophers have looked upon it as the manifestation of "an extra-organic force within the living creature, and acting by and through it, but numerically distinct from it."

An intermediate class of thinkers is represented by Prof. St. George Mivart who looks upon life as "a peculiar form of force which is *intra-organic*, so that it and the visible living body are one thing, as the impress on stamped wax and the wax are one, though we can ideally distinguish between the two." On this view, Mr. Mivart more explicitly says, a given animal or plant is regarded, "not as a piece of complex matter played upon by physical forces,

which are transformed by what they traverse, but rather as a peculiar immanent principle or form of force (whosoever and howsoever arising), which for a time manifests itself by the activities of a certain mass of complex material, with which it is so entirely one that it may be said to constitute and be such animal or plant much rather than the lump of matter, which we can see and handle, can be said to constitute such animal or plant." The organism is thus admitted to be a mass of complex material having activities of its own, but it is not allowed to be the plant or the animal without the immanent principle. Death on this view is the dissolution of the union of the immanent principle and the organism, for says he, "on this view a so-called 'dead bird' is no bird at all, save by abuse of language, nor is a 'corpse' really a 'dead man'—such terms being self-contradictory as would be the expression a 'dead living creature.'"

Does Prof. Mivart mean that the organism may remain entire, that the arrangement and relationship of its parts, molecular and molar, may remain intact, and yet death take place? It is admitted that there are alterations of that arrangement which are not inconsistent with the mere working of the organism as a living body, though inconsistent with its normal working, with its health, just as there are alterations in the arrangement of the parts of a watch, of a steam-engine, of a telegraphic apparatus, which do not prevent the movements of the hands of the watch, of the piston of the steam-engine, of the magnetic needle of the telegraphic apparatus, though these movements may not be exactly what they are desired to be. There are other alterations in a living organism which are absolutely incompatible with the continuance of life, just as there are alterations in the arrangements of parts of a watch, of a steam-engine, of an electric telegraph, which may bring them to a dead lock. In the case of the living organism these alterations may be invisible and even undetectable by our present means and methods, but nevertheless no physiologist now believes that death can take place while the arrangements of parts, molecular or molar, in a living organism remain intact. When we speak of a 'dead bird' or 'dead man,' the terms 'bird' and 'man,' are not used in the same sense in which they are used to signify 'living bird' and 'living man.' The expressions 'dead bird' and 'dead man' are mere abbreviated

expressions to signify that organisms, which once were living, are now so altered as to have ceased to be living.

This immanent principle or form of force is believed to be the synthesiser of the varied activities of a living organism, and has hence been called by Prof. Mivart a PRINCIPLE OF INDIVIDUATION. The reason why Prof. Mivart says we must admit the existence of a living or individuating principle is that "the *synthesis* of such forces as we find in a living creature is certainly no where to be met with in the inorganic world." To this it may be answered that such synthesis is not met with in the inorganic world simply because the only condition of its manifestation is the peculiar arrangement of matter we call a living organism, and the moment such an arrangement takes place it passes from the inorganic to the organic world. Though the highest inventions of man fall infinitely short of the lowest living organism so far as the power of assimilation and reproduction are concerned, have we not in the working of these machines some approach however remote to the principle of individuation whereby the various forces of the various parts of the machines are regulated and co-ordinated, in a word, unified, to subserve a definite purpose?

But whatever the name, immanent principle, form of force, or principle of individuation, it is difficult to understand what is definitely meant by it. It must be evident from the extracts we have given that there is doubt in the Professor's mind as to when or how the immanent individuating principle arises. From the contempt he shows to the organism as 'the lump of matter' which cannot be the living plant or animal, the only inference we can draw is that he does not look upon life as resulting from the arrangement of matter constituting a living organism. And from what he says further on that "as structure and function vary together (as do the convexities and concavities of a curved line), so 'the principle of individuation' or soul of an animal or plant and its material organization must necessarily arise, vary, and be destroyed simultaneously, unless some special character, as in the case of man, may lead us to consider it exceptional in nature," it must be evident that life and organization having a simultaneous origin and destruction, the life-principle is simply immanent in, and not the product of, that

organization. In this fine speculation we must say there is a singular want of the scientific conception of force, and hence there is an absurd distinction between force and activities. Notwithstanding his high authority we are compelled to reject Prof. Mivart's theory of life as not only unscientific but unintelligible.

So far then as the phenomena of life are concerned, of life that is common to both animals and vegetables, there is no need for the supposition of a separate entity or force or principle, extra- or intra-organic, to account for them. Though man has not been able to imitate nature in producing a machine approaching the lowest living organism, yet he has advanced sufficiently enough to arrange matter in such a way as to bring about the regulation and co-ordination of the forces in the various parts of his machines such as are observed in the working of living organisms. And from this the inference is natural and almost inevitable that the process of assimilation and reproduction could be produced if we could only know how to arrange matter in a peculiar way so as to create a living organism. Life, then, pure and simple, being the resultant of the forces of a material machine, cannot survive the destruction of that machine, just as the splendour and the music cannot survive the lamp and the lute.

But what of man's higher, psychical life? "You will observe," says Dr. Hughes, "that in all this (i. e. in all that he has said about the destruction of the material life with the material body,) I have been saying nothing of the distinctive faculties of man—of thought, and love, and conscience, and will. I have spoken only of the life which he has in common with the beasts that perish, aye, and with the plants of the field. His higher life may well have for its substratum some entity of another kind, some substance which we can only characterise by calling it spiritual." The undying curiosity that is in us asks whence this spiritual substance? Dr. Hughes has left this question unanswered. But the question is a most important one, and we venture to reproduce here what we said on the subject in this Journal (Vol. iii., 1870), in order to invite fresh discussion on it:

"Ever since man has begun to make himself the subject of his thoughts, the most perplexing questions that must have occurred to him again and again, are, whether the substratum of what he calls himself is material or immaterial? whether he is anything

distinct from what is called the corporeal frame, though intimately connected with it? These might seem to be idle questions, but they are in reality not so, as with them are interwoven other questions of supreme importance, such as, what is the significance of death? Does it close existence for ever? Or will some thing, the real man, survive it?

"In venturing to speculate about the nature of mind from its manifestations and the conditions of those manifestations, we might be accused of presuming to dive beyond the phenomena. For the question now is not simply, whether the phenomena of the mind are or are not essentially distinct from what we know as the ordinary phenomena of matter, but whether those phenomena are to be referred to a substratum or substrata, other than those which form the bases of material phenomena. If this should smack of the spirit of the schoolmen, of the old metaphysical spirit, so justly condemned by Comte, we cannot help it, because the fault is not in us, but in the language we have to employ.

"The most conclusive evidence of the materiality of the mind could be furnished if man could be created *de novo*, not out of already existing human beings, but out of ordinary materials. Or in the absence of this, if the experiments, recently announced of having succeeded in forming living infusoria from materials containing nothing living, were free from all fallacy, then we might be said to have evidence on this point tantamount to positive demonstration. But unfortunately these experiments have been proved to be wanting in scientific rigor and exactitude. Nevertheless, in the absence of such demonstrative experiments, have we not, daily and hourly before our eyes, other and almost similar experiments performed for us by nature, and to a large extent modifiable by ourselves, which nearly demonstrate the point in question? We see the genesis of living beings, and we avail ourselves of the laws governing it, to modify at our will the character, physical and even mental, of beings that we want to call into existence.

"The facts of biology all tend to show that in this globe there has been progress in the department of life from the lower to the higher, nay, that there has been a gradual evolution of higher organizations from the lower; so that if we could master the law

of this progressive evolution, we could predict what the character of the race next to the human would be, just as by determining the law of a mathematical series, we can determine any term of the series. Of course it is needless to say, that the biological problem is infinitely more difficult than the mathematical.

“Such being the law of organization, and mind being so intimately associated with organization, it is hard not to believe that the mind is a product of organization: And when from cerebral organology we learn how intimate that association is, how in fact, the brain is the measure of the capacities of the mind, to believe that the mind does not owe its origin to organization could only be done under the shadow of hypotheses beset with infinitely greater difficulties in the way of their acceptance. For if we refuse to look upon the mind as having its genesis in the organism, we must account for its existence there, and we can only do so by either of the following ways. We must suppose that at some period of intra-uterine life, the mind or the soul is by the Creator breathed into the forming organism, its temporary dwelling house, or the soul having been once breathed into the first man, is continued into successive generations by the sperm-cell and the germ-cell. The greatest stumbling-block to this belief is offered by the Darwinian hypothesis of progressive development, just alluded to, a hypothesis which is daily receiving confirmation, and is soon likely to take rank as an established fact of science. The only other alternative is to revert to the crude doctrine of transmigration of souls. We shall have to suppose that spirits are floating and flying about every where, seeking for suitable organisms for their temporary habitations either from choice, or doomed to them by an unalterable fate, or by an irrevocable curse of some greater being. Such an hypothesis would introduce the greatest confusion in the affairs of life, because it would do away altogether with the law of causation, and therefore would shut up all scientific prevision, the genuine test, as Comte justly said, of positivity in science.

“But because the mind has its genesis in a material organization, and may be after all but a subtle material organization itself, it does not follow that it cannot at any stage of its existence be independent of the parent organization. We know how, though the child is dependent upon the mother for its develop-

ment and growth up to a certain point of its existence, it becomes independent of her after that; and we do not see why the same may not be the case with the mind or the subtler essence which thinks and feels, which is the true man, the inner man as it has been so happily called, with reference to the grosser body, whose function it is to rear up the spirit enclosed within it. Roughly speaking, a man is the man of material dimensions whom we can see and handle, &c. But physiology tells us that the true man is lodged in the nervous system. Now the most recent revelations of the microscope tell us that the nervous system essentially consists of tubules and cells, and that the tubule and the cell are not very simple things but apparatuses of a most complex organization, there being layer within layer, till we reach a fluid lying innermost of all, which seems to be the theatre of all real nervous phenomena, and at particular localities of which, we have the highest manifestation of nervous phenomena, the phenomena of the mind. Cerebral organology has just begun to give us some insight into these localities and their functions."

*(To be continued.)*

## EDITOR'S NOTES.

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### UREA IN THE BLOOD.

The following is the proportion of urea in blood from different parts of the body : 1. The venous blood, returning from the head or limbs, contains no more urea than the arterial blood conveyed to these parts ; consequently, any urea from these must be carried away by the lymphatics. 2. Blood which has passed through the spleen or liver contains more urea than arterial blood ; the difference is greatest during digestion, and the quantity of urea may reach nine milligrammes in 100 cubic centimetres of blood.

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### COOKS AND COOKING.

We may live without poetry, music, and art,  
 We may live without conscience, and live without heart,  
 We may live without friends,  
 We may live without books,  
 But civilized man cannot live without cooks.

We may live without books—

What is knowledge but grieving ?

We may live without hope—

What is hope but deceiving ?

We may live without love—what is passion but pining ?

But where is the man that can live without dining ?

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### HYDROCELE IN THE FEMALE.

Mr. Samuel Osborn has reported, in the *Lancet* for March 7, two cases of the above disease, one of which was hydrocele of the femoral canal and the other of the canal of Nuck, the former being the rarer disease of the two. Both of them were tapped and tincture iodine was injected as usual, with success. Hydrocele in females is a very rare occurrence indeed. They are frequently mistaken for femoral hernia. An absence of impulse on coughing, and sometimes fluctuation, are the only available diagnostic signs, though transparency by transmitted light, as observed by Mr. Osborn, would be the most trustworthy sign. This may hold good in England but not in India where pigments of the body are sufficiently dark to absorb all rays of light.

ANTAGONISM BETWEEN ACIDS AND ALKALIES IN MODIFYING  
THE TONICITY OF THE HEART AND ARTERIES.

Drs. Ringer and Buxton, in an article above named in the *Lancet*, Jan. 3, has thus summarized their conclusions. 1. The tonicity of the heart and vessels produced by alkaline solutions of sodium salts, such as are present in normal blood, will not only not appear in the presence of an acid, but will not be induced in the presence of potassium chloride; thence it is inconceivable how, large quantities of potassium chloride existing in the blood, the tonicity of the heart and arteries can be due to varying degrees of alkalinity. 2. The alkalinity of the solution does not determine its power of producing tonicity in the muscles of the heart and small vessels, and hence this result may accrue from the degree of chemical saturation of the sodium present in the sodium salt.

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INNERVATION OF THE LARYNX.

PROFESSOR SIGMUND EXNER, in his work, *Die Innervation des Kehlkopfes* (Vienna, 1884), announces the discovery of a third laryngeal nerve—*nervus laryngeus medius*. This nerve is derived from the pharyngeal and laryngeal plexus formed by the pharyngeal branch of the vagus with other nerves, and enters the crico-thyroid muscle, which is also supplied by the external branch of the superior laryngeal nerve. The inter-arytænoid muscle is supplied by both upper and both lower laryngeal nerves, and, generally, each muscle is innervated by several nerves. The above conclusions are deduced from three lines of research: 1, irritation of nerves in living animals; 2, degenerations of nerves after section in living animals; 3, examination of the larynx in children (*post mortem*).—*British Medical Journal*, March 14.

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TREATMENT OF HYSTERIA BY ISOLATION.

Professor Charcot, in a clinical lecture on Hysteria, thus spoke of isolation in the treatment of the disease:

"I cannot too much impress upon you the great importance which I attach to isolation in the treatment of hysteria, in which, without any possible contradiction, the physical element plays in most cases a considerable, even when not a predominant, part. It is now nearly fifteen years since I became firmly attached to this doctrine, and all that I have daily seen since then has only served to confirm me more

and more in my opinion. Yes, this separation of children or adults from their parents, whose influence experience has demonstrated is so pernicious, must be insisted on, although it is not always easy to explain the reason for it, especially to the mothers, who will understand nothing of the sort, and in general only yield at the last extremity. In private practice, isolation, such as I understand it, is practised daily for cases of this kind under the most favourable conditions."

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#### THE MENSTRUAL TEMPERATURE

The old theory of menstruation that it is a general perturbation of the system, the menstrual flow being but a local manifestation of it, has received confirmation from some recent researches of Dr. Rienl of Franzensbad. Taking the *menstrual period* as lasting about 4 days, he calls the previous four days the *premenstrual period* and the subsequent four days the *post menstrual period*. The remaining period of the lunar month about sixteen days he calls *the interval*. The highest temperature was observed during the *premenstrual period* and the lowest during the middle of the first half of *the interval*. The temperature "steadily rose till the second half of *the interval*, when the rise became more rapid, reaching its height at the *premenstrual period*. It fell steadily and rather rapidly during the *menstrual period*, the fall continuing but becoming slower during the *post menstrual period*, and reaching its lowest point in the midst of the first half of *the interval*. In cases of operation upon the pelvic organs, the after temperatures tended to rise to their highest point during the *menstrual*, and not during the *premenstrual period*."—*British Medical Journal*, Feb. 14.

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#### TOXÆMIC EFFECTS FROM THE INJECTION OF URINE.

The Paris correspondent of the *British Medical Journal* of Jan. 3, gives the following, as the uniform result of the experiments by M. Bouchard of injecting normal urine into the veins of rabbits :—"The pupil contracts, the respiration becomes weaker, and urine is abundant; reflex action of the cornea and other parts disappears; the temperature lessens, respiration is arrested, and the animal dies. Respiration stops before the heart-beats disappear. If the dose do not kill, coma appears, and the respiration is quicker; in about ten minutes, the animal improves, and in half an hour it is cured. Forty or sixty cubic centimetres of urine kill a rabbit. The urine of the animals experimented

on becomes generally slightly albuminous. Normal urine clearly contains different substances of unequal toxic power. All its constituent elements, even the water in it, are more or less toxic. It is, therefore, easily explained why certain pathological phenomena, like uræmia, vary according to the case; sometimes coma is present, sometimes convulsions. The toxic agent is probably different in each instance. The temperature is almost always lowered, which is probably due to the presence of several toxic agents, combined with the one which contracts the pupil. It is demonstrated that water injected into the veins increases the temperature, but urine lowers it. "The toxic effect of urine varies with each specimen."

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#### THE BACILLUS OF SYPHILIS.

The last accession to bacteriology is the discovery of the bacillus peculiar to syphilis by Dr. Lustgarten. After examining 16 cases of which 2 were indurated lymphatic glands, 3 were papular outgrowths, 4 products of the gummatous stage, 3 were secretions from hard chancres and 3 were mucous tubercles, he has found invariably a peculiar kind of bacillus quite distinct from any other in their appearance and mode of cultivation. Their existence in soft sore he has never been able to establish. These organisms consist of rods, straight or curved, sometimes irregularly curved, of a deep blue colour. As a rule they are from 3.5 to 4.5  $\mu$  long and from  $\frac{1}{2}$  to 3 and 10  $\mu$  thick. Under a low power they present a regular smooth outline with a slight swelling at each end; examined with an immersion lens the surface has an irregular wavy outline. Spores can also be seen which appear in the form of clear and brilliant oval spots in the bacilli, from two to four arranged at equal distances being found in each bacillus. These bacilli are never free, but are enclosed in rounded oval or polygonal cells, about double the size of a white blood corpuscle, which often have a central or peripheral nucleus in the form of a clear spot. In these cells the bacilli are found in groups of from two to nine or even more, entwined with each other or massed together, sometimes in serrated masses. These bacillus-containing cells are rarely met with in the middle of the cellular infiltration, they are found in greater numbers at the edges of the infiltrated part, and in the apparently normal neighbouring tissues. They are also to be seen in the papillæ of the malpighian layer, and they have been seen enclosed in the lumen of a large lymphatic vessel. They are, then, migrating cells endowed with the power of active locomotion.

TIME REQUIRED TO DIGEST DIFFERENT FOODS.

*The Monitor de la Salud* contains, in a recent number, the results of some experiments lately made by E. Jessen on the time required for the digestion of certain kinds of food. The stomach of the person on whom the experiments were made was emptied by means of a pump; 100 grammes, equal to 1,544 grains, or about  $2\frac{3}{4}$  ounces, of meat, finely chopped and mixed with three times the quantity of water, were introduced. The experiment was considered ended when the matter on removal by the pump, was found to contain no muscular fibre.

It will be remembered that the gramme weighs nearly  $15\frac{1}{2}$  grains, and the cubic centigramme is equal to 1 gramme. The  $2\frac{3}{4}$  ounces of meat were therefore mixed with nearly eight ounces of water, before being introduced into the stomach.

The results were as follows :

Beef, raw, and finely chopped . . . . .	2	hours.
„ half cooked . . . . .	$2\frac{1}{2}$	„
„ well cooked . . . . .	3	„
„ slightly roasted . . . . .	3	„
„ well roasted . . . . .	4	„
Mutton, raw . . . . .	2	„
Veal . . . . .	$2\frac{1}{2}$	„
Pork . . . . .	3	„

The digestibility of milk was examined in the same way. The quantity used was regulated so that the nitrogen should be the same as in the 100 grammes of beef.

602 cubic centimeters, nearly sixteen ounces, of cow's milk,	
not boiled, required . . . . .	$3\frac{1}{2}$ hours.
602 cubic centimeters, boiled . . . . .	4 „
602 „ „ sour . . . . .	$3\frac{1}{2}$ „
675 „ „ skimmed . . . . .	$3\frac{1}{2}$ „
656 „ „ goat's milk, not boiled . . . . .	$3\frac{1}{2}$ „

*Scientific American*, April 11, Supplement.

THE COMMA BACILLUS OF KOCH.

Whether the comma bacillus of Koch is the cause of cholera or not, this much appears to be established that “ it is a new bacillus, different from every other known bacillus, both in appearance and, in its mode of development in the cultivating medium.”

The distinctions between the comma-bacillus of Finkler and Prior and that of Koch, as pointed out by Dr. Heron, are: The comma-bacillus of Finkler and Prior was associated with decomposition, and its cultivation evolved a putrefactive odour. It closely resembled Koch's comma-bacillus when seen under the microscope, but much importance should not be attached to such a resemblance. When planted on nutritive beef-jelly, both the organisms multiplied, but in a very different way. At ordinary temperatures (about 60° Fahr.) the bacillus of Finkler and Prior grew with great rapidity, producing an appearance which was characteristic. The gelatine in the neighbourhood of the puncture made by the inoculating wire was liquefied and permeated by a homogeneous opaque growth, having an appearance somewhat resembling the finger of a glove, or, as had been said, the toe of a stocking, pushed in the gelatine. The bacillus of Koch grew very much less rapidly under the same conditions. On the second or third day the track of the inoculating wire was marked only by a thin line of colonies, along which the comma-bacillus was slowly growing, springing from a dimple on the surface of the gelatine. These differences in the mode of growth were constant, and afforded a means of distinguishing between the two organisms. When sown on potatoes, the bacillus of Finkler and Prior grew with great rapidity, but the bacillus of Koch developed but very slightly."

According to Dr. Klein, "Comma-bacilli of various species have been discovered in other disease of the alimentary canal, in the fluid of the mouth of normal persons (Lewis), in old cheese (Deneke). The comma-bacilli, found by Finkler and Prior in cholera nostras, differ in mode of growth from Koch's comma-bacilli of cholera; so do those found in diarrhoea due to other causes; but those of the fluid of the mouth are identical with Koch's comma-bacilli in many respects."

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#### M. STRAUS ON COMMA BACILLUS.

The following are the objections of M. Straus, the Chief of the French Cholera Commission in Egypt, to the comma bacillus being the cause of cholera (*Med. Times*, April 18):—

1. The predominance of the comma bacillus in the intestinal contents was only temporary, and that the longer the cholera was prolonged the less abundant it became in the contents of the intestine and in the stools, until after a few days it entirely disappeared, and

could not be detected even by the method of cultivation. Koch's explanation of this was, that at the commencement of the disease the comma bacillus was developed with such vigour that, so to speak, it supplanted all the other micro-organisms contained in the intestine, but that very soon the putrefactive microbes spread, and interfered with the growth of the comma bacillus. This antagonism between the putrefactive organisms and the comma bacillus did not seem to him clearly proved; it so happened that he had preserved a certain number of impure cultivations of bacilli in tubes with gelatine, and at the end of ten or fifteen days these tubes emitted a true fecal odour, and yet they still contained an immense quantity of comma bacilli possessed of all their vitality, inside of their admixture with putrefactive organisms.

2. No competent histologist, in spite of the most active search in this direction, had been able to establish in the liver, spleen, kidneys, or glands of cholera patients the presence of any organisms at all, let alone the comma bacillus. The latter only invaded the superficial layers of the intestinal mucous and sub-mucous membranes, and had never been seen occupying the muscular layer; besides, it was not met with in a state of purity, but mixed with various microbes. Again, the invasion of the mucous membrane of the lower part of the small intestine was only observed in prolonged cases of cholera. If, therefore, the comma bacillus was the true cause of cholera, it presented the very strange peculiarity of possessing the property of provoking such grave symptoms, and such profound alteration in the blood, kidneys, &c., merely by its presence in the contents of the intestines, since it was never met with in the blood or viscera, and, in rapid cases at any rate, it did not even invade the intestinal mucous membrane in any appreciable degree. This would create for it in the history of pathogenic microbes a place quite special.

3. Messrs Finkler and Prior had forwarded a specimen of their organism to M. Pasteur, and thus he (M. Straus) had had the opportunity of studying and cultivating it. Morphologically, it was impossible to find the slightest appreciable difference between the organism of Messrs. Finkler and Prior and the comma bacillus. According to Koch, the appearance of the cultivations would be different, and the organism discovered by the Bonn physicians would develop more rapidly, and more speedily render gelatine fluid. In his own comparative cultivations these differences had not struck him, and, indeed, he had established the exact opposite, for the organism of Finkler appeared to develop less quickly than the comma bacillus.

4. The possibility of aerial transmission at a short distance had been accepted by eminent authorities, and it was absolutely irreconcilable with the bacillary theory of Koch, since the comma bacillus did not produce spores, and was speedily destroyed by desiccation, and it was, of course, only whilst in this state that any diffusion by the air could take place. The transmission of cholera by clothing, &c., did not accord well with the idea of the absence of germs, and with the scanty resisting power of the comma bacillus to desiccation. Lastly, seeing the extreme readiness with which the comma bacillus flourished in the majority of cultivation media at temperature varying from 16° to 40° C. it was a matter for surprise that the disease when once introduced into a country should not have become endemic excepting in India.

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### Acknowledgment.

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## CLINICAL RECORD.

## A Case of Sloughing Dysentery.

BY BABU HEM CHANDRA RAI CHAUDHURI, L.M.S.

An aged lady, a relative of mine, was attacked with dysentery on the 9th of October 1884. I saw her on the 10th. The stools were mixed with mucus and blood accompanied by tenesmus and severe griping at the umbilical region. The stools were very frequent, almost incessant. I gave her *Coloc.* 6.

Without finding any improvement, on the next day *Merc. c.* 6 was prescribed.

No relief followed and her brother placed her on the morning of the 12th under the treatment of a Kaviraj; she was under his treatment up to the evening of next day; the disease, however, took a worse turn, and on the night of the 13th she was placed under the treatment of an old school physician. In addition to mucus and blood sloughs were seen in the stools. She was under his treatment up to the 20th. He prescribed gallic acid, sulphuric acid, hazelene, opium, kurchi, &c. The number of stools and the quantity of blood slightly lessened for the first 2 or 3 days. There was no fever from the beginning. Diet, barley water. After 2 or 3 days there was no further improvement. On the 20th she was unable to rise any more from her bed, and passed stools almost unconsciously.

I saw her again on the night of the 20th. The stools were only mucus and blood mixed with slough and of a fœtid odour, she was very much prostrated and passed the stools almost unconsciously. I gave her *Nux vomica* 6. The next morning the quantity of blood slightly decreased and the medicine was continued. Diet, milk and barley water.

On the afternoon of the 22nd, seeing no further change, I gave her *Merc. c.* 4.

23rd. The number of stools, the quantity of blood and the sloughs were less, but not to a very great extent.

24th. Expecting a better result I changed the dilution, and gave her *Merc. c.* 2.

25th. Morning. The result was marvellous. There was complete disappearance of mucus, blood and the sloughs. In the afternoon I saw the stools. They were of a black color, slightly fœtid, but still there was some urging and colicky pain at the umbilical region.

After each stool there was a feeling of weakness. I gave her *Lept. 3*, which was continued up to the morning of the 26th. Diet, gandhal (*Pæderia foetida*) soup, milk and barley water.

26th, afternoon. Though she was doing little better than before, still the stools, the colicky pains, and the feeling of weakness remained almost the same. Expecting again a better turn from a lower dilution, I gave her *Lept. 1*.

27th. The stools were of a yellow color. She was doing very well.

The medicine was discontinued from the 28th.

#### Remarks.

This case clearly proves what change of dilutions can do when there is a proper selection of the remedy. *Colc. 6* and *Merc. c. 6* evidently failed but the lower dilutions of *Merc. c.* succeeded remarkably well.

I gave *Nux v.* thinking that the disease took the sudden bad turn on account of continued large doses of *Opium*, &c., which proved to be of some efficacy at first. The indication for *Leptandra* was clear; its third dilution did not prove of much value, but its first succeeded very well.

#### A Case of Sloughing Whitlow.

UNDER CARE OF DR. M. L. SIRCAR, M.D.

Babu L. V. M., aged 38, first noticed pain in the last phalanx (external border) of the right index finger about the 15th October 1884. In a day or two the pain became more and more acute, and the part became red and swollen.

A day or two after the commencement of the inflammation he took *Bell. 3* and *Sil. 6* successively, and applied ice and cold water, but finding no relief he came to Dr. Sircar on the 20th inst. He was advised to take *Arn. 3* internally, and to apply a lotion of its mother tincture, attributing the inflammation to the process of fitting corks into phials which the patient, being a homœopathic druggist, was in the habit of doing.

There was some relief of his sufferings on the first day after taking *Arnica*, but the pain subsequently became as bad as before. On the 24th he was seen again by Dr. Sircar, who prescribed *Sil. 20*, and the medicine was continued for two or three days without any effect.

Thinking suppuration to be inevitable, patient took of his own

accord *Hep. sulph.* 3, and applied an ointment of Nim (*Azadirachta Indica*), which had once given him good result in a similar case, but it failed him in his own. The inflammation became worse, and to get relief he had the inflamed part incised, or rather punctured, by a friend. After the operation the pain doubly increased, the part became more inflamed and the wound assumed a gangrenous character. He came again to Dr. Sircar on the 7th or 8th November. He was advised to take *Led.* 3 internally, and, to apply *Calendula* lotion externally. This at once put a stop to the threatened gangrene, and reduced the inflammation in the course of nearly a week. The slough not showing any tendency to detach itself, *Lach.* 30 was prescribed, and the *Calendula* lotion was made a little stronger than before. In about 2 or 3 days the slough came away and the ulcer healed up rapidly. He was quite well by the end of November.

### *A Case of Neuralgia of the Teeth.*

BY BABU JADU NATH MOOKERJEE.

Since the setting in of the hot season I have been taking acid conjee water, with other acids almost daily, without feeling any way the worse for it. A fortnight ago I felt some uneasiness in the left lower jaw along the roots of the molars; it generally used to come on at dead of night while sleeping, but it lasted only a few minutes and passed off so easily by a little pressure that it never cost me a thought afterwards, as I rose from my bed quite free of the pain. This slight weakness continued for a week, in spite of which I continued my conjee water with relish. Gradually the dull gnawing pain in the lower jaw would occur from time to time even during the day. This attracted my notice and put me on my guard. I stopped taking the conjee and other acids daily. Suddenly on the 17th of April the pain increased from an early hour in the morning and made me very uneasy throughout the day, until it became constant and grew so much worse at about 4 P. M. that I had to resort to *bell.*, *merc.*, *china*, and *coffea* successively during the night without finding any relief from any of them. In the morning Dr. Sircar was sent for and on his coming to see me, he attributed all my sufferings to the inordinate use of conjee water and other acids, and ordered *Ars.* 12 to be taken every 2 hours up to 3 doses; the first dose procured me sleep, the second made the pain intermit, and the 3rd removed all vestige of the disease, with the exception of some soreness along the course of the nerve.

The symptoms, which indicated the medicines were—lancinating pain in the left lower jaw along the root of the last incisor which was very tender to touch, towards the last molar; pain aggravated by cold water but relieved by hard pressure; toothache, with flow of saliva in the mouth relieved momentarily by pressing the upper row of teeth against the lower ones; sometimes extends into the ear, no thirst, pains maddening extorting cries, headache, and great restlessness.

Some twelve days after this, I had a relapse, probably due to some irregularity in diet. I tried *Arsenic* again but to no effect; this was very much puzzling to me, consequently I had to study my case again and found that the symptoms had changed; formerly cold water would aggravate the pains, while on the present occasion I felt relieved by holding cold water in the mouth; this very symptom suggested *coffea* and I felt very much relieved after taking 2 or 3 doses, but the relief did not last long; I took *Aco.* 6, which at once removed all my trouble.

#### *A Case of Genuine Typhoid (Enteric) Fever.*

REPORTED BY BABU BARADA PRASAD DAS.

B—, a Hindoo, aged twenty-six years, had the first attack of fever about the beginning of February last, which was supposed to have been of a remittent type and treated allopathically. The foul tongue, the costive bowels and morning remissions were considered as indications for cathartics and quinine; the bowels were accordingly freely opened, but instead of a salutary effect upon the fever, diarrhoea was set agoing. The stools were 10 or 12 in number in twenty-four hours, were yellowish, and watery in consistence. Sixty grains of *Quinine* were given in divided doses without being able to check the evening exacerbations. This state of things went on up to the 10th or 11th day when I was consulted. My first visit was at 8 P. M. The patient complained of sleeplessness and reported to have passed eight stools of the character described above up to that time, and stated he expected two or three more during the rest of the night. The medicine I chose for him was *podophyllum* 6, of which he took two drops in two doses. The patient cheerfully reported to me on the following morning that he had good sleep during the previous night without the least disturbance of his bowels. On my evening visit I was told he had two scanty consistent stools, the evening temperature was only 99. Improvement was complete on the day after. Neither the bowels

nor the thermometer indicating the least abnormality, and for four successive days the patient took his usual rice.

Every thing fared well for a week or 8 days, at the end of which, that is, on the 20th February last, the patient feeling unwell towards evening took his temperature himself and found it to be 99.

I saw the patient again on the evening of the 21st, the temperature was 103.4, pulse 116, full and moderately hard. He complained of great chilliness and aching pain of the limbs. I prescribed *Acon.* 2.

22nd February, morning, the patient was very much the same, only the pulse was reduced in frequency, the number being 106. From this time till the morning of the 2nd March the pulse kept this number. There was absence of thirst, loathing of food, retching, tongue coated white, one stool in twenty-four hours said to be thin and foetid, excessive buzzing in the ears, heaviness of the head after sleep. There was no positive delirium but the patient had good deal of dreaming at night during the latter part of the first week.

*Rhus tox* and *Carbo veg.* were prescribed; but my medicines having had no effect upon the fever I sought your (Editor's) advice. *Gels.*, *ant. c.* and *nux v.* were successively given according to indications then existing. Our diagnosis was that the fever was of a remittent type.

It was however on the morning of the 27th February that the fever unmasked itself and revealed its true character, copious red spots were seen covering the front of the chest, upper extremities and back, the face was remarkably free from them as also were the lower extremities. These eruptions faded on pressure, were lenticular, of reddish tint and closely resembled those so accurately illustrated by Dr. Murchison in his *Treatise on Continued Fevers*. I at once recognised them as the characteristic eruptions of enteric fever, and lost no time to invite you to see them. After careful observation you confirmed my diagnosis. The patient you remember did not complain of the least pain in his abdomen on pressure, neither was there any rumbling in the right iliac region. The medicine we gave was *bapt.* 3. The patient had no stool that day. But on the noon of the following day he passed one which consisted of two portions, the one being formed and the other watery and of light yellow color. This remarkable contrast in one stool, I must confess I had never seen before. You saw the patient again on the evening of the 2nd March with me. The temperature was 103.4 and the pulse, which all along after aconite varied between 102 to 106, rose that evening to 114 but presented nothing extraordinary in its character. The patient talked well to his attendants during the day. There was vacancy of look and

hardness of hearing. In our conversation with him it was discovered that though intelligence was not wanting yet he appeared to take time in collecting thoughts. On being asked by one of the patient's friends if the fever was making any favorable progress, you replied that no improvement could be expected at that stage of the fever which was a genuine typhoid one, and that the disease had yet to reach its climax.

This remark alarmed the family, and they lost no time in sending for Dr. X an allopath of considerable renown, on that very night. That gentleman attended on the following morning. He declared the case to be one of remittent fever. I drew his attention to the red spots, but he was of opinion that they could not be taken as indicative of enteric fever as the abdominal pain and pea-soup-like diarrhoeic stool so very characteristic of it were both absent. The medicines he prescribed were aromatic spirits of ammonia, nitric ether, brandy, and bismuth.

The brandy in each dose of the mixture was  $\text{ʒss}$ , which was given every two hours. Besides this,  $\text{ʒss}$  of brandy with arrowroot was ordered to be given frequently. At our evening visit we found the pulse full, hard and strong, beating 124 times in the minute, and it was reported that he talked nonsense while awake about twice or thrice during the day which, it must be said, he did for the first time that day, as there was no delirium either in the day or night during the previous treatment.

The patient had one stool nearly solid at night. This character of the pulse we mistook for improvement and was considered as the result of the strengthening effect of brandy upon the heart. The occurrence of waking delirium was altogether left out of consideration. On the following morning chicken broth with brandy was substituted for arrowroot, and the quantity of brandy increased to a drachm in each dose of the mixture. From this time forth the delirium began to increase, and the pulse became more and more frequent till it numbered 140 or sometimes 144 in the minute. But nothing would deter us from pushing our favorite panacea, brandy, not even when delirium merged into coma, and coma into stupor, and the tongue became rough, brown and dry. Delirium we considered to be the result of an ill nourished brain, and brandy was thought to nourish it, the rapidity of the pulse was attributed to weakness of the heart, and brandy, in combination with chloric ether and ammonia, was believed to strengthen it. The reduction of temperature was another of the objects for administering it. Thus it was given with the triple object of nourishing the brain, supporting the heart, and reducing the fever heat. But none of these

effects was unfortunately achieved. Our predominant idea was to keep the patient alive by these means till the crisis was over. It is worthy of note, however, that in spite of brandy which we increased to 3oz in 24 hours, the pulse which on the first day of its administration, seemed to gain in volume and strength, after 3 days began to be slenderer and quicker. The upper lid of the right eye swelled, the eye itself was suffused and congested on the evening of the 7th Feb., the left one was also similarly affected on the following day. There was neither any dulness on percussing the chest nor any moist râles audible. But the right lung was perfectly inactive inasmuch as air could not be heard to enter into it. There was peurile respiration in the left one. What this phenomenon means it is for you, Sir, to say. I think it was due to paralysis of that lung owing to cerebral mischief.

We consulted with Dr. Y. on the 7th, both he and Dr. X. were unanimous in their decision as to the non-enteric character of the fever. Dr. Y. closely examined the eruptions, but was of opinion that they were mosquito bites and could not be characteristic of typhoid fever as abdominal pain was markedly absent. But why the most exposed parts of the body, such as the face and lower extremities, were free from them, and why the most covered parts (covered because the patient always slept with his shirt on), such as the chest, the arms and back, were most sprinkled with them was a puzzle to me. Besides, it must be said that the patient had a curtain hanging over him during the night. Dr. Y. said, typhoid eruptions could not be so numerous as they were in this case. Their number does not exceed thirty or forty. The pulse this day was 140. At last our conclusion was that correct diagnosis was not of much practical importance and that whatever the character of the fever was, whether it was enteric or low remittent fever with mosquito-bites, the patient should be kept alive with ammonia, brandy, musk and broth till the crisis was over. The question of blistering the head was raised by Dr. X. but Dr. Y. advised to wait till he could see the case on the following day.

February 8th, morning. Pulse very rapid. Temperature 105, the patient had slight consciousness

11 A. M.—Passed involuntarily on the bed clothes one copious stool consisting only of very fetid clots of blood.

12 Noon. Temperature 106, passed four more fetid bloody stools, and died at 5 P. M.

Dr. X. saw the patient an hour before his death and was convinced by the intestinal hæmorrhage of the true enteric character of the fever.

## Remarks.

From the above report it must be evident that the doctors were entirely mistaken in their diagnosis. The presence of abdominal pain and profuse diarrhœa having been considered invariable concomitants of enteric fever, their absence in this case turned the scale in favor of a fever other than enteric, so much so, that even the characteristic eruptions were discounted. But if we refer to Dr. Murchison's valuable *Treatise on Continued Fevers*, we will find that neither profuse diarrhœa nor the existence of abdominal pain and tenderness are necessary symptoms of enteric fever. He says, "of 31 mild cases pain and tenderness were absent in four." They were absent in our case, which was by no means a mild one.

The diarrhœa in this case was not excessive, but it may even be absent, the same author says, "diarrhœa is not invariably present. In seven of my 100 cases observed before 1862 it existed at no stage of the disease, and in four there was constipation, and that 10 only died out of 59 cases in which the diarrhœa was moderate or slight."

With reference to the pathognomonic character of the spots Dr. Murchison observes: "It is important to determine whether the lenticular spots above described be ever present in other diseases than enteric fever. Louis, in the first edition of his work (1829), stated that he had found them in 12 cases of other acute diseases, but in the second edition (1841), he observed, that in the intervening twelve years he had sought for them in vain in every disease but 'typhoid fever,' and he was inclined to think that he had formerly mistaken ordinary pimples for the lenticular spots. Possibly other observers have committed a similar error. Dr. Waller of Prague, and Messrs. Barthez and Rilliet state, that they have met with lenticular rose spots in cases of acute phthisis: but their observations require confirmation. At the London Fever Hospital I have had occasion to examine many thousand cases of acute disease of every form, and my opinion is that an eruption, which presents all the characters above mentioned, is peculiar to enteric fever."

To return to the treatment that was pursued after the discontinuance of homœopathy. We began, as I have told you, stimulating the patient from the moment we undertook to treat him allopathically, we administered Vin. Gallici and all the diffusible stimulants. What was the result? The patient became delirious after a few doses of them on the very day of their administration, and his pulse became full, bounding, strong and quick, assumed I would venture to say rather an inflammatory character. Day by day his condition grew worse and

worse. We attributed every thing to the progress of the disease, and did not pause for a single moment to consider what share our medicines had in bringing about the unpleasant symptoms. Whatever might have been the consequence ultimately under homœopathic treatment, there cannot be the slightest doubt whatever, that the stimulants contributed to expedite the development of the very grave symptoms which marked the progress of the case. I would not hesitate to go the length of saying that the occurrence of profuse intestinal hæmorrhage shortly before death was due to our drugs. While they paralysed as I believe the brain, they also paralysed the vaso-motor nerves, which in their healthy state exercise that influence over the blood vessels by which their normal contractility is preserved. Hence their paralysis produced the opposite condition of the vessels and profuse hæmorrhage was the result.

In continually pushing stimulating drugs we did not claim for them any specific influence over the disease, but our predominant idea was, as I have told you, to keep the patient alive till the crisis was over. Is there, Sir, I ask you, any soundness in this theory? For my part I must confess, I cannot understand how we possibly can get over a crisis by simply keeping up the heart's action or stimulating the nervous system. Unless we are able to meet the disease itself by suitable medicines, it must go on producing organic and functional changes in the system till death ensues. But there may be diseases, which after some time spend their force and recovery results. In these cases we are required neither to modify their course nor check their violence by medicines, nor keep up vitality by stimulation. In the present case it was supposed that there was every likelihood of the heart failing ultimately, and it was to avert this that stimulants were resorted to in anticipation. But suppose we thought that hæmorrhage would ultimately result, would it have been reasonable to administer styptics long before there was any external manifestation of it?

## THERAPEUTICS OF CONSTIPATION, DIARRHŒA, DYSENTERY, AND CHOLERA.

### 76. CROTON TIGLIUM.

#### Constipation :

1. Absence of the usual daily evacuations, and at length a scanty one, caused by the efforts of the abdominal muscles, unaided by the peristaltic action of the bowels.
2. The usual morning st. did not occur, but in the evening an unsatisfactory soft stool passed slowly and sluggishly.
3. St. crumbly, solid, passed with exertion.
4. St. tenacious.
5. Urging to st., with fulness in the abdomen and apparent fulness of the rectum ; the st. was scanty and difficult to pass.
6. Frequent urging to st. without result ; the usual st. followed, succeeded by slight pains in the rectum.

#### Diarrhœa :

1. Violent purging, with great pain in bowels, passages being without pain and apparently involuntary ; the fæces had numerous streaks of a white, shining, emulsion-like substance mixed with a large quantity of clear glairy fluid.
2. Numerous evacuations, the first flocculent, the others yellow and green.
3. Sts at first nodular, mixed with many white points, the second containing many white long worms as large as threads ; the remaining nine evacuations offensive and bilious, or slimy, and at last watery.
4. Solid st., followed by liquid sts., with slight hœmorrhœm and slight colic, in the epigastric region, and hypochondrium.
5. St. diarrhœa-like, light yellow, accompanied by sweat, crawling in the occiput, pressure upon the larynx, especially the left side.
6. Cutting pains, tenesmus, and alvine evacuation, at first pultaceous, then liquid, mingled with mucus and bile, then diarrhœaic sts. of a greenish yellow.
7. Dirty yellow, mealy sts.
8. Profuse st. with rumbling in the abdomen.
9. Diarrhœaic sts., without colic, without urging.
10. Soft sts., without tenesmus, and without heat in the anus.
11. Pasty st. with burning in the anus.
12. Thin liquid st. with passage of flatus.
13. St. at first fecal afterwards watery, with slight sticking pain in the abdomen.
14. Urging and tenesmus while sitting at st., with however passage of very little thin st., of a green brown color, evacuated very forcibly as if shot out of the rectum.
15. St. followed by very painful sore sensation within the anus, with feeling as though the rectum was swollen and protrude with constant desire for another evacuation.

16. Urging to st., in the morning, in bed ; on rising, a st. rather soft, light-brown, followed by a very sore sensation in the anus.
17. Sudden urging to st., he was unable to reach the closet, nevertheless was obliged to sit a long time.
18. Constant urging to st., followed by *sudden* pasty evacuation, which is *shot out of the rectum*, of a dirty green color and offensive.
19. Nausea followed by sudden vomiting of a sour, strong smelling fluid ; after vomiting, diarrhœa with a feeling as though a fluid were swashing about in the abdomen.
20. Vomiting, borborygmi and diarrhœa.
21. Cutting about the navel, as though two knives were cutting towards each other in the intestines, relieved by two evacuations ; after which a watery st. follows, without any disturbance

### **Dysentery :**

1. A pasty light-brown st. covered with mucus, with frequent urging, followed by rumbling and gurgling in the left side of the abdomen, after another hour, a second, very soft, pasty, mucous, and urgent st. of a grayish green and dirty brown color, *which is evacuated forcibly.*
2. Slimy st with tenesmus
3. Soon after luncheon, tenesmus and scanty evacuation, mixed with mucus.
4. Copious mucous sts., with some colic, but without tenesmus.
5. Soft slimy evacuations, without griping, with some tenesmus.

### **Cholera :**

1. Watery, painless sts.
2. St. very thin, like yellowish water, *forcibly evacuated.*

### **Aggravation :**

1. Morning.
2. After luncheon.
3. After drinking. (Bell.)
4. While nursing. (Bell.)
5. At every movement. (Bell.)
6. From fruit. From sweetmeat (Bell.)

### **Amelioration :**

1. After sleeping.

### **Before St :**

1. Urging.
2. Movements and retractions, with dragging pains in the upper abdomen and umbilical region.
3. Griping in the transverse colon, repeated before every st.
4. Cutting pains, tenesmus.

### **During St :**

1. Pain in bowels.
2. Colic.
3. Tenesmus.
4. Urging.

5. Rumbling.
6. Sweat, crawling in the occiput, pressure upon the larynx.
7. Burning in the anus.
8. Passage of flatus.
9. Scratching of the posterior left wall of the anus.
10. Sticking pain in the abdomen.
11. Gripping.
12. Nausea.
13. Protrusion of the rectum.

**After St :**

1. Rumbling and gurgling in the left side of the abdomen.
2. Painful sore sensation within the anus, with feeling as though the rectum was swollen and would protrude with constant desire for another evacuation.
3. Sweat upon the forehead, nausea, vanishing<sup>d</sup> of sight and hearing. General prostration, ill humour, and loss of appetite.
4. Scraping in the anus.
5. Sore sensation in the anus.

**Rectum and Anus :**

1. Feeling within the rectum as though purging would follow.
2. Swelling and burning extending to the anus.
3. Upon pressing upon the umbilicus a painful sensation is felt down to the anus, where there is constant pressing outwards.
4. Burning about the anus, so that he was scarcely able to sit.
5. Pulsating sticking, burning and itching in the anus. Sore pain and burning in the anus after moving about.
6. Dragging to the anus, as if diarrhœa would easily ensue.
7. Pain in the anus, as if a plug were sticking in it and forcing outward.
8. Great urging and pressing towards the rectum.
9. Frequent urging to st. without result.

**General Symptoms :**

1. Great depression of spirits. Anxiety.
2. Confusion of the head with vomiting.
3. Vertigo with nausea, so that she was obliged to go into the open air, where she became worse, looked pale, seemed very weak and exhausted.
4. Countenance distressed, pale and rather shrunk. Jaundice.
5. Face pale with sensation of coldness. Face, hands and toes cyanotic. Face expressive of fatigue and debility.
6. Swelling and redness of the face and eyelids which are covered with small vesicles.
7. Lips dry, cracked and tense.
8. Tongue white showing impress of teeth ; red, smooth, glistening and dry in centre ; furred and dry.
9. Swelling and numbness of the tongue.
10. Tongue felt too large for his mouth and appeared to be without feeling ; nevertheless there was no change

in the size or appearance of the tongue or parts about the mouth. .

11. Inflammation of the mouth, lips and pharynx. .
12. Dryness of the mouth, without thirst.
13. Burning in the mouth, throat and pharynx, extending into the œsophagus.
14. Profuse secretion of saliva and mucus.
15. Taste at first sweetish, afterwards extremely bitter and burning; the scraping-burning taste was coincident with increased warmth and accumulation of saliva.
16. Taste nauseous, flat; pasty; bitter; bad; sharp, sour rising from the stomach.
17. Hunger without appetite. Loss of appetite.
18. Intense thirst. Aversion to beer.
19. Empty eructation followed by nausea. Eructations watery; acrid and burning; bilious.
20. Hiccough, yawning.
21. Heart-burn with nausea.
22. Nausea and vertigo increased in the open air. Nausea with collection of sour water in the mouth. Nausea and eructation after every drink. Nausea and inclination to vomit after taking some milk.
23. Violent retching with very difficult vomiting of yellowish water, of an oily smell, and sweetish bitter oily taste.
24. Severe vomiting of matter containing numerous streaks of a white, shiny, emulsion like substance, mixed with clear, glairy fluid.
25. Sudden violent vomiting, frequently repeated, of whitish, yellow, frothy, liquid; with most violent contractions of the stomach.
26. Vomiting of some water, mucus, and food, with constant nausea after eating.
27. An unpleasant sensation of emptiness and hunger, and rumbling in the abdomen.
28. Sinking in the stomach with sensation of weakness.
29. Burning and feeling of repletion in the stomach.
30. Abdomen full and distended with griping about the navel.
31. Rumbling and gurgling in the abdomen.
32. Frequent emission of offensive flatus.
33. Violent annoying tension and distension of the whole abdomen, with urging to st., tenesmus, and emission of offensive flatus from the anus; these symptoms are worse while sitting than while walking or standing.
34. Swashing in the intestines as from water.
35. Increased secretion of urine which was turbid and cloudy.
36. Urine pale and frothy, depositing a white sediment.
37. Urine, standing over night, is pale orange-yellow, with a slight turbid sediment, which is at first somewhat flocculent.
38. The urine has a cloudy deposit which, however, gradually disappears, and after twenty four hours brownish crystals

form which seem to float where the clouds have been, and adhere to the walls of the glass.

39. Trembling of whole body. Very great debility. State of collapse.
40. During vomiting constant tendency to faint, and deathly, indescribable feeling of prostration. Sleepiness and prostration.
41. Very restless, tossing convulsively about as if in pain.

**Remarks :** *Croton tig.* may be used for constipation when the stools are solid and crumbly, or soft, unsatisfactory and scanty, in both cases with great exertion of the abdominal muscles, without or with scarcely any aid from the peristaltic action of the intestines. We believe it is likely to be useful in such constipation, especially if it comes on after diarrhœa.

**Croton** is one of our most valuable medicines in diarrhœa with the characteristic stools. The stools are either watery and profuse, or mucous and scanty; or they may pass through all the stages of solid, pasty, liquid, mucous. Almost invariably, even when the stools are involuntary, they are forcibly evacuated, as if shot out of the rectum. There is no suppression of urine from croton, hence it cannot be useful in genuine cholera. But there is a good deal of nausea and vomiting accompanying the purging, hence it will be often necessary in choleraic diarrhœa so often prevalent during epidemic visitations of the dire disease. Dr. Escalier has reported his own case, with the symptoms, "stools about every twenty minutes, and in the interval almost continual urging, borborygmi, heat in the whole abdomen, extreme prostration, general coldness, sunken eyes and altered countenance," as cured by *croton* 5, after the failure of *Ipec.*, *Verat.*, *Phos. ac.*, and *Serale*. Dr. Hoyne, from whose *Clinical Therapeutics* we have cited this case, has gathered in his valuable work, the following other cases, to show the curative powers of the drug in diarrhœa :

*Case 1308.* During the past season I treated a case of diarrhœa or cholera infantum, in a child aged ten months, that had been sick five weeks, constantly growing worse. The child was very sick; the discharges were frequent, green, slimy, immediately after eating or drinking, coming out all at once; shot out; *Croton tig.* 200 relieved the case in six hours, and in forty-eight hours I dismissed it cured. Dr. A. M. Cushing.

*Case 1309.* Stool yellowish brown color, much undigested food, sudden expulsion, some straining and passing of flatus, aggravated in morning and after eating. Cutting pain in bowels before stool. *China*, *Nat. sulph.* failed. *Croton tig.* 2c succeeded. Dr. C. Pearson.

*Case 1310.* Protracted case; emaciation, yellow, liquid stools, occurring chiefly after nursing, discharged "like a dipper of water thrown on the floor." *Croton tig.* 20 cured. Dr. H. V. Miller.

*Case 1311.* K., æt. seven months, diarrhœa, stools watery, yellow, at times slightly green; passed in a single gush; very little prostration; frequent during the day, none at night. *Crot. tig.* 200, two doses cured. Dr. Goodno.

**Case 1312.** C., æt. 6 months, vomiting and diarrhoea after taking the least nourishment; stools profuse, watery, yellow, at times yellowish-green; passed with a single gush; about twenty-five stools during the day, none at night. Extreme prostration and emaciation, boring of head in pillows; fontanelles sunken; body and extremities cold; convulsions. *Crot. tig.* 200, two doses cured. Dr. Goodno.

**Case 1313.** *Croton tig.*, in drop doses, of the 3rd or 6th dil., cured excessive nausea and frequent discharges of greenish or yellowish water from the bowels. Dr. A. E. Small.

**Case 1315.** Boy, aged one and half years, scrofulous, was taken with a whitish, painless diarrhoea, perfectly inodorous, which gushed from the anus like water from a spring; one gush and it is over, with great prostration; after the passage, dry, parched lips. *Crot. tig.* cured. Dr. A. J. Brewster.

Dr. Bell's remarks on this drug are so very appropriate that we have great pleasure in transcribing them here: "The three highly characteristic symptoms of *Crot. tig.*, the yellow watery stool, sudden expulsion, and aggravation from drink and food, form a trio whose presence will render success certain and brilliant. This stool is not always painful. The other stools have the same conditions, and are quickly cured by this remedy."

## 77. CUBEBA.

### Constipation:

1. Constipation often lasting for eight days. (H.)

### Diarrhoea:

1. D. with borborygmi, flatulence and involuntary sts. (H.)
2. Light yellow D., specked with white, with much colic and tenesmus. (H.)
3. Noisy flatus and frequent, copious, soft, bilious, black, yellow, and sometimes blood streaked sts. (H.)
4. Distressing diarrhoea with headache.
5. Peculiar odour to the evacuations, perspiration and saliva.
6. Copious diarrhoea-like evacuations.

### Dysentery:

1. Scanty, but frequent dysenteric sts., with colic and tenesmus. (H.)
2. Diarrhoeic and dysenteric sts., with copious discharge of blood, and rapid failure of strength. (H.)

### Before St:

1. Colic and gripes in the hypogastric region.

### During St:

1. Borborygmi, flatulence. Loud discharge of flatus.
2. Colic, tenesmus.

### After St:

1. Rapid failure of strength.

### Rectum and Anus:

1. Burning in the rectum.
2. Sweating of the rectum preventing defæcation. (H.)
3. Excessive prolapsus ani, which is of a deep red colour. (H.)

4. Bulky tumours at the anus. (H.)
5. Flowing hæmorrhoids, with discharge of black blood, or of yellow purulent matter. (H.)
6. Itching-burning excoriations, and condylomata at the anus. (H.)
7. Distensive and burning pains in the anus, as if it contained a foreign body. (H.)

#### **General Symptoms :**

1. Mania ; desire to strike and kill.
2. Delirium ; lascivious words and thoughts, with violent priapism.
3. Loss of memory.
4. Features so completely changed as to leave no trace of their natural expression.
5. Flushing of face. Face excessively swollen.
6. Tongue very white ; furred and moist.
7. Great salivation ; he froths at the mouth when talking ; froth from the open mouth, when sleeping. (H.)
8. Taste sour, bitter, salty, acrid, insipid or bloody. Everything he eats tastes too salt or insipid. (H.)
9. Intense thirst. Burning in the stomach.
10. Constant nausea and occasional vomiting.
11. Flatulence. Burning in the abdomen.
12. Inflammation of urethra. Secretion of mucus from urethra greatly increased.
13. Urine increased in quantity, deepened in colour and smells of the drug. Hæmaturia.
14. Emaciation. Extreme weakness. Convulsions.

**Remarks :** Notwithstanding that some of the symptoms (marked H.) are taken from Houtat, there can be no doubt, however that **Cubeb** is capable of producing both diarrhœa and dysentery, and hence it will be useful in both these affections, especially when accompanied by the characteristic urethral inflammation.

## Gleanings from Contemporary Literature.

### RECENT PATHOLOGY, IN ITS BEARINGS ON SCIENTIFIC THERAPEUTICS; INVOLVING THE QUESTION—CAN HOMŒOPATHIC TREATMENT WITH INFINITESIMAL DOSES CUT SHORT INFECTIOUS DISEASES DEPENDENT ON LIVING GERMS?\*

By J. W. HAYWARD, M.D.

GENTLEMEN,—It is my privilege to welcome you to-day to the fourteenth of the second series of our British Homœopathic Congresses. I do so very cordially, and for several reasons. Amongst others, for mutual encouragement in the fulfilling of our duty as trustees of the homœopathic doctrine and method; for mutual professional profit; and for mutual social pleasure. And I also bid you welcome to this meeting because we are, by being excluded from the British Medical Association, denied our rights of sharing in the annual gatherings of the profession to which we belong.

Thanks, however, to the revelations of science and the teachings of clinical experience, which are continually furnishing fresh evidences of the truth and wisdom of our doctrines, bitter persecution by our colleagues of the old school is being replaced by that sincerest form of flattery—imitation. Our method is being adopted and our material appropriated to an extent that would be most gratifying to us were our colleagues sufficiently honourable to admit the source of their newly-acquired therapeutic knowledge and means. Surely, under the circumstances, the ban of exclusion cannot be much longer maintained! But whether it can or not, let us continue to exhibit towards our colleagues a strictly honourable and professional bearing.

Since our last meeting, owing to their numbers and leisure, and by means of their monopolising the privileges of the profession in the shape of University, Collegiate, Hospital and Government appointments, the members of the old school in this country have made considerable progress in surgery and pathology; and some little in medicine also. In medicine, two main features have been predominant, viz., eager pursuit of living germs as the cause of disease, and desultory pursuit of the physiological effects of drugs; the latter by crude experimentation, in imitation of our provings, which they had previously ridiculed.

In the new school we have had to mourn the loss of two of the veterans of medical reform, viz., Dr. Hilbers, whose strong intellectual and sympathetic social, faculties commanded respect for homœopathy wherever he went; and Dr. Madden, to whose high moral and intellectual endowments both the literature and practice of homœopathy are greatly indebted; and whose address, as President of the Congress at Oxford was, to my mind, one of the most convincing expositions of the scientific basis of homœopathy that has appeared in any language. These are some of our losses: what are our gains? Let us hope that their places are being filled by recruits worthy to occupy them: men who will feed the homœopathic cow as well as milk her. Let our young men look to it that they be not drones, or mere sponges, but worthy followers of the great men that have gone before, even though their being so should call upon them to render some sacrifices at the shrine of professional honour and duty.

\* The Presidential Address at the British Homœopathic Congress, held in London, September 18th, 1884.

The chief progress amongst ourselves has been, as it ever should be, in *Materia Medica* and *Therapeutics*. These are, in fact, peculiarly our sphere. To us, indeed, is committed the perfecting of these branches of our profession. And it is, therefore, very proper that much time and attention have been given to the subject of *Materia Medica*, not only in this country but also in America and France.

The first thing required by the preparers of a suitable *Materia Medica*, is, of course, a collection of pure pathogenetic material in the form of poisonings and provings, shorn of all redundant and doubtful matter, as proposed by Dr. Hughes and adopted by the British Homœopathic Society. And it will have been observed by the notice in the *Monthly Homœopathic Review* for last month that the "Bureau of *Materia Medica* and Provings" of the American Institute has joined the British Homœopathic Society in an attempt to make such a collection, which is to be issued in parts, free to the members of the two societies, under the title of *A Cyclopædia of Drug Pathogenesis*. This cyclopædia will be of great value to the medical student in studying the physiological action of drugs; but it will not meet the requirements of the medical practitioner in his daily work of prescribing, because unprovided with any means of practical application; and it will be no substitute whatever for the *Materia Medica*, properly so-called. It will, however, serve for all future time as a trustworthy source of drug effects from which those engaged in setting forth these effects in forms convenient for the use of practitioners as well as students may draw reliable, and perhaps otherwise inaccessible, material. It will also have been observed by a review in the last number of the *British Journal of Homœopathy*, that in France a volume of *Materia Medica* has been published under the editorship of Dr. Jousset. This, also, though not without value, falls far short of what is required. In our own country, in accordance with the arrangements come to at the Edinburgh Congress, our efforts have been directed to the preparing of a *Materia Medica* adapted to the wants of both student and practitioner. For the student the pathogenetic material has been presented in the original poisonings and provings, merely shorn of all redundant and doubtful matter, with critical and explanatory comments on the general and topical action of the drugs; and for the practitioner, a register of the effects on the various organs and regions of the body has been constructed, with indexes, and with references to the lines of the poisonings and provings, to enable him without difficulty or loss of time to find any particular symptom, with all its natural relationships; and added to these are therapeutic hints, comments and clinical confirmations. A specimen volume has been published displaying several samples, and this, it is hoped, our practitioners will purchase and use; and it is desired that they will give the compilers the benefit of their criticisms for future guidance. It is probable, therefore, that before long a *Materia Medica* will be forthcoming that will not only serve the purposes of the student and practitioner of the new school, but will also command the respect and acceptance of the student and practitioner of the old school. Dr. Hughes will, to-day, ask for your opinion on this "*Materia Medica* of the Future."

At the present stage of the reformation in Medicine it is unnecessary for me, on such an occasion as this, to dwell on the question of what homœopathy is, or on the grounds of our faith in it, or on its origin, its progress, its truth, or its scientific character; or on the wisdom of using one medicine at a time; or on the necessity, the advantage, or the scientific and practical value of the small dose used in the curing of diseases and the proving of drugs. All these topics have been sufficiently enlarged upon in previous presidential addresses, and have been amply demonstrated in our literature and practice; in fact, they have been so expounded as to have carried conviction to the mind of many of the less prejudiced amongst the adherents

of traditional medicines, and those who have not been afraid to look into our theory and practice. This is seen in the adoption, though secretly, of some of our remedies, and of our mode of applying them. Homœopathy is, in short, leavening the whole lump of the profession, and assuredly becoming the therapeutical system of the future. This absorption of our remedies and mode of practice, together with the abandonment of bleeding, blistering, salivation and other heroic measures, has lessened the contrast between the old and new schools, and has so far diminished one of the reasons the public had for preferring the new school practitioner. Imperfect as this empirical method is, we rejoice to see it, because of the immense benefit rendered to the patient-world by even this mere guesswork homœopathy. We must, however, remind ourselves that this adoption of crude homœopathy by old school practitioners makes it all the more necessary for us to give our patients the advantage of true and scientific homœopathy ; to be careful to keep ourselves familiar with the details of the *Materia Medica* and the practical use of repertories ; to be abreast of the science of the day, and equal to old school practitioners in all scientific and even empirical and domestic practical helps.

After considering on what subject I might with greatest advantage address you, I have concluded that I should best answer the purpose for which you placed me in this honourable position, and best serve the interests of our profession, by laying before you a few thoughts on the pathological doctrine now occupying the medical mind, viz., the *germ theory of disease*, and its bearings on the treatment of disease, under the title of "*Recent Pathology in its bearings on Scientific Therapeutics*," putting emphasis on the adjectives "recent" and "scientific."

Pathology and Therapeutics, as such, like TENNYSON'S *Brook*, "go on for ever," but the views entertained thereon—at least by the majority of the profession—"come and go," and are continually changing. At one time diseases were to be treated with anti-spasmodics, because they were supposed depend upon spasm of the capillaries ; at another they must be met by anti-phlogistics, because inflammation was at the bottom of all morbid processes, and bleeding, purgation, and starvation were the order of the day ; at another time tonics must be used in all cases, because asthenia was the root of all disease, and tonics, stimulants, and beef tea must be poured into the luckless patients, whether the system could appropriate them or not ; whilst at the present day, disinfectants and germicides, such as mercuric chloride, thymol, benzoate of soda, creosote, benzoic acid, salicylic acid, carbolic acid, eucalyptol, quinine, sulpho-carbolates, hypophosphites, and such like substances are the means to be used, because minute living organisms, or "germs," are credited with being the cause of almost all the diseases that flesh is heir to. And yet, as homœopathic physicians well know, throughout all time diseased processes have remained the same, and have required the same treatment ! Morbid processes were the same when the almost universal treatment was anti-phlogistic as they were when it was anti-spasmodic, and when it was stimulant and tonic ; and they are the same now, although anti-spasmodics, anti-phlogistics, and tonics and stimulants have been abandoned in favour of germicides ; and, moreover, they will be the same when germicides have in their turn been given up under the influence of some new pathological *ignis fatuus*, which history teaches us to look for in the not far distant future. Many and great have been the disappointments caused by the fallacy of these supposed discoveries, and by the eager pursuit of these pathological will-o'-the-wisps—this search for the medical "philosopher's stone ;" and yet, for all these, the search still goes on, as though there had never been any disappointment at all ! Even experience does not make medical fools wise. And, moreover, many have been the victims that have been actually slain in this pursuit, and

many more who have been rendered helpless and miserable for the remainder of their lives ; while to the same source must we look for the origin of such vicious and destructive habits as laudanum-drinking, periodical venesections, calomel powders, morphia injections, bromide and chloral intoxication, and alcohol drinking and drunkenness, each and all of which have for several generations been undermining the health and morals of the British people. From these, emancipation is only just now being achieved under the united efforts of the followers of Hahnemann, Sir John Forbes, and Dr. B. W. Richardson, assisted by the revelations of science and the lessons taught by physiology and clinical experience. No wonder that Hahnemann should inveigh against these crude and dangerous pathological speculations, or at least against their being made the basis of the treatment of disease ; it would have been no wonder, indeed, had he become somewhat intoxicated by the greatness and beneficence of his own discovery, which put a stop at once and for ever to any even seeming necessity for the spinning of such pathological cobwebs for the purpose of the treatment of disease. And yet, strange as it may appear, and notwithstanding all these failures, disappointments, and exposures, even yet, another pathological speculation—the germ theory of disease—and another method of treatment, based on it, have been advanced even at the present day ! The treatment of disease has consequently been made to assume another new phase ! The unsophisticated practitioner must now ignore all he has learned about anti-phlogistics and tonics, and put in practice the new treatment with disinfectants and germicides. But with what practical result ? Very little, for experience has already begun to prove the futility of such treatment, by showing that no substance is able to kill germs in the body without killing the patient too ; no, nor even to kill the germs existing in a local disease, without also destroying the part in which they are embedded ! When will the profession learn wisdom on this matter ? When will it see that the cure of disease is *not* to be based upon a pathological theory ! It would appear as if the old-school physicians could not treat disease except through some pathological theory ; with them it is not the patient, but some supposed pathological state, that is the object of cure ; in this instance it is a germ that has to be killed. Truly scientific physicians, however, know well that the human body is neither a chemist's test tube in which one poison may be neutralised by another, nor yet a battlefield for a trial of strength between the causes of disease on the one hand and the medicines provided by the apothecary on the other.

They are well aware that pathology is but disordered physiology, disease only disordered health, and morbid action simply disordered healthy action. They know, also, that there is a tendency in nature herself, not only to continue normal action but to recover it after it has been distorted by some external cause ; and, further, they are well aware that the restoring of normal action is nature's own work, not the physician's. Why, then, it may be asked, should we, as practical physicians, trouble ourselves at all about the theories of pathological speculators ? Truly, why ! Simply, I think, because it is possible there may be some degree of truth in some of them ; and as we belong to the medical profession, the members of which practise an art based upon progressive science, it behoves us to note all its struggles after perfection. The germ theory then having been broached, it behoves us to carefully examine it, and to form some estimate of its claims to acceptance and of its bearings on the treatment of disease, and to endeavour to ascertain whether it is based on a greater amount of truth than previous interpretations of morbid action, or if it is destined, as they were, to do much damage to mankind and then pass away into the region of forgetfulness, leaving behind, as they did, a wreck of disappointed pathological speculators and maimed and degraded humanity. We should enquire :—

Has this last new theory really anything in it likely to be of service to mankind—to help either physician or patient? And if it has really some truth in it, what is the truth, and what bearing should it have on scientific therapeutics? These are questions well worth a careful consideration in this general assembly of *scientific physicians*.

What then is the germ theory of disease? In examining the theory let us first of all enquire what is a *disease germ*? According to one of the greatest authorities on this question—Dr. Lionel Beale—every germ, whether vegetal or animal, for there are both, every germ comes from living or germinal matter, and from this only; it is an independent particle of germinal or living matter. It may be of extreme minuteness, even less than the hundred-thousandth part of an inch in diameter, but, if living matter, it is a germ. This minute living speck may take up lifeless or dead matter and convert into living matter like itself, and thus grow. It may then divide and subdivide so as to multiply a millionfold within a few hours. It may give rise to successive generations of new particles of germs having similar powers or properties to itself, or, under altered surroundings, there may emanate from it particles of a higher or lower type, that is of an abnormal character or construction—distorted or morbid germs with perverted vital activity and a tendency to grow into morbid structures. [Vide, *Disease Germs*, 2nd ed., p. 10.] The matter of which these germs are composed is protoplasm or bioplasm, which is a transparent, structureless, semifluid, clear matter, having the same microscopic appearances in both vegetables and animals. "There is," says Beale, "no possibility of identifying the different kinds of bioplasmic matter under the microscope; the most minute living particles of a living vegetable organism exactly resemble those of an animalcule, or those which may become developed into beings still higher in the scale, and these cannot be distinguished from particles of bioplasm derived from the living matter of pus, or white-blood corpuscle of man himself" [p. 35.] Vegetal germs are named "bacteria," and animal germs are called "bioplasts."

Stated briefly, then, it may be said that the germ theory—that is, the latest, the present day pathological speculation on the nature of disease—is, that many diseases, at least many infectious and contagious diseases, depend upon (arise from, are caused by) minute living morbid particles called germs, which find their way into the body and into the blood. As to zymotic diseases, for instance, it is held that living pathogenetic germs or their spores having made their way into the blood, and found material suitable for their nourishment (unless prevented by treatment), they, at the expense of this material, grow and multiply in the blood and tissues at the rate of many millionfold per day, until they have exhausted this material, as the yeast germ does in the wort; and, having exhausted it, or replaced it by some of their own products, they cannot live any longer, so they die; and if, after this the blood and nervous system are left in a state capable of carrying on the vital processes the patient recovers, if not he dies: the disease itself being the commotion produced in the system, either by the presence of these germs as foreign bodies in the blood, or by the loss of the material they have appropriated, or by some ferment they have produced. Dr. Beale says:—"Among the most fatal diseases from which man and the higher animals suffer are those which are called contagious or infectious. These depend upon a poison, which, having entered the body, grows and multiplies there in a marvellous manner peculiar to matter which is alive. The living poison may be introduced into our bodies in the air we breathe, in the water we drink, or in the food we eat; and may possibly also gain access to us by the pores of the skin." [p. 85.] And referring to the pathogenetic germs (there are both pathogenetic and non-pathogenetic) he writes:—"They are living, and increase as living

particles alone increase. They grow, they feed upon the nutrient juices of the organism and upon the tissues, and in the some cases flourish at their expense and destroy them. The poison which enters may be so infinitesimal in quantity that it can neither be measured or weighed, nor, under ordinary circumstances, seen; but having gained access to the blood and tissues, it increases to such an extent that in many cases sufficient is produced in one subject to infect hundreds of persons, the population of a town, or even a whole country." [pp. 1 and 2.]

It is further held that the germ theory affords, and is the only one that does afford, a satisfactory explanation of the phenomena of the zymotic diseases—of their origin by infection, of their incubation, their specific character, and their definite cause and progress, as well as of the subsequent immunity from future attacks, and of natural and acquired immunity in general. The incubation period is the time occupied by the growth and multiplication of the germs to the point of intolerance; the disease is the period of struggle between the germs and the vital powers of the individual; the convalescence is the recovery of normal action and repair of the damage done, whilst the immunity is the resulting somewhat permanently altered vital action, or altered construction of the blood.

Now all this is very reasonable, and no objection need be raised against the germ theory on any of these points, nor do homœopathic physicians, as such, offer any objection to it on any one of them. The germ theory is only objected to when it is put forward as a guide to the treatment of disease. Homœopathic physicians are quite as delighted as others can be to obtain what appears to be a true explanation of the real nature of disease. We are also quite as well acquainted as our colleagues of the old school with the fact that many diseases are intimately associated with the presence of parasites and germs, and quite as able to recognise the apparently satisfactory explanation the theory affords of the phenomena of the zymotic and contagious diseases. We also know well the essential nature of scabies, and the connection of ringworm, tinea, favus, pityriasis, and other parasitic skin diseases, with the so-called fungus cells in the form of bacteria, &c. Nor are we unacquainted with the fact of the presence of bacillus in anthrax, the spirillum in relapsing fever, the micrococcus in some cases of erysipelas, or of morbid bioplasts in such diseases as influenza, glanders, rabies, purulent ophthalmia, gonorrhœa, and primary syphilis; and we know, too, that cryptogamic plant—or fungus cells or spores as micrococci and bacteria, as well as cells or bioplasts thrown off from animal bodies, both healthy and diseased, are floating about in the air, almost everywhere in myriads, and are constantly settling on our skin and mucous membranes, and being taken in with the air we breathe, the water we drink, and the food we eat, so as to coat our tongue, teeth, respiratory and digestive mucous membranes, and thus get into our blood and become interspersed everywhere amongst our tissues, where they are ever ready, on meeting with a suitable nidus or part where the vital resistance is low, or as Dr. W. J. Collins might say: With the suitable pabulum provided by degraded vitality resulting from unhealthy surroundings [Vide *Specificity and Evolution*, pp. 21 & 19], to multiply either on or within us; if they be innocent to do us little or no harm, but if morbid or pathogenic to poison us more or less—that is, to throw us into a state of disease local or general. With all this we are quite familiar, and with the natural history and course and termination of the morbid states connected therewith. But none of these facts are themselves at all new, all that is new about them is their discovery. It is not only in the nineteenth century that the vegetable world has produced fungi, or that the spores of these have floated in the air and settled on animals and men, or been admitted into their blood and tissues. All this must have been going on ever since the vegetable

and animal worlds began, so that if vegetal spores in the blood do really produce disease they must have done so ever since the beginning, and this in the open country where there is little zymotic disease as well as in towns and cities, where there is much. If zymotic diseases are now dependent on vegetal germs, they have always been so; unless indeed we are to assert that by the law of evolution innocent vegetal germs have, under the influence of civilisation, degenerated into such as are dangerously pathogenetic.

Most writers on the germ theory, however, maintain that the pathogenetic germs are *vegetal* organisms, in the form of micrococci, bacteria, bacilli, spirilla, &c. Beale, however, maintains that in most diseases they are *animal* organisms—that is, minute particles of living morbid bioplasm thrown off from the body of diseased persons or animals. And it is quite true, that animals as well as vegetables do produce and throw off living particles or germs. Animals as well as vegetables are made up of anatomical units or cells composed of living or germinal matter—the protoplasm or bioplasm already described. These particles or bioplasts, as already remarked, are of extreme minuteness; and they are alive; that is, the matter of which they are composed (bioplasm) is always in a state of internal or molecular, perhaps, atomic motion, *sur generis* or vital motion (Beale, pp. 128-243). The vital motion within the bioplasts of any particular individual is the resultant of the union of the motions of the atoms or molecules of the germ cell and sperm cell of the parents; and in healthy persons it is said to be “normal.” The motion appears to be most active, or the attraction the strongest, in the centre of each little particle or bioplast, and drawing inwards, forming a kind of vortex of vital activity, by which the atoms of the surrounding pabulum are drawn in towards the centre of the little particle, where they are impressed with the special vital motion of the particular bioplast, whether that be normal or abnormal. The atoms drawn in to the centre displace those already there, pushing them outwards farther and farther until, pushed beyond the influence of the central activity, they become formed material or cell wall, and are thrown off. Now the same process that goes on with the atoms in the bioplasts goes on with the bioplasts in the body; they, too, are pushed outwards farther and farther until they are thrown out in the exhalations, secretions and excretions; endless numbers of them being thrown out by the breath, by the cutaneous exhalations, and by the urine and stools. These particles being so extremely minute and light float in the air, and are of course particularly abundant in the air surrounding animal bodies; and, floating in the surrounding air, they settle on all things in the neighbourhood, and on the skin and mucous membrane of persons in the immediate vicinity; they are also taken in with the air they breathe, with the water they drink, and with the food they eat, and thus get into their blood. If the individual from whom they are escaping is healthy, they will be healthy, and perhaps innocent; but if he be in a state of disease, such as scarlatina, morbilli, variola, pertussis, &c., they will be morbid or pathogenetic, and liable to multiply in the blood and tissues in the manner before mentioned, and to set up the same disease as that in the person from whom they were derived.

Such is, I think, a fair exposition of the germ theory of disease. In it, as will be observed, there are involved three special statements, viz.: (1) That many diseases are caused by living germs. (2) That these germs are of *vegetal* origin; that is, are bacteria of various kinds. (3) That the germs are of *animal* origin; that is, are particles of the living bioplasm of diseased persons.

I am myself ready to admit that there may be truth in all the three statements. I believe that many diseases are caused by living germs, and

that in a large number of diseases these germs are, as Beale says, morbid bioplasts; whilst in some diseases they may be, in accordance with the more general opinion, bacteria. The poison which enters as a mere speck, and rapidly multiplies within the body many millionfold within a few days, cannot, I think, be anything else than a living germ. That some diseases, such as purulent ophthalmia, gonorrhoea, and primary syphilis are caused by morbid particles transferred from one person to another is, I think, beyond dispute; and that anthrax (malignant pustule, splenic fever) is associated with the presence of a bacterium—the bacillus anthracis—is, I think, also a patent fact. But between these two extremes we find a large number of diseases, in some of which the evidence pointing to the correct classification is not very clear; these are such as specific influenza, glanders, rabies, morbilli, scarlatina, varicelli, vaccinia, variola, typhus fever, yellow fever, rheumatic fever, pertussis, pneumonia, septicæmia, cholera, typhoid fever, erysipelas, leprosy, tuberculosis, relapsing fever, and some others. Some of those at the beginning of this list, viz., influenza, glanders, rabies, morbilli, scarlatina, and typhus are, to my mind, most probably caused by morbid animal bioplasts, for bacteria have not been found in them, whilst morbid bioplasts have; some of those at the end of the list, viz., relapsing fever, tuberculosis and leprosy may possibly arise from bacteria; at any rate bacteria, as well as morbid bioplasts, are found in connection with them. Davaine, Pasteur, Koch, Feltz, Tyndall and others are of opinion that the germs are in all cases bacteria, and they refuse to recognise any alternative; this has been made very evident in Koch's searches for the cholera germ, in which nothing else but a bacterium or bacillus has been looked for. Whilst, as before stated, Beale appears to be of opinion that the germs are morbid bioplasts derived from previously diseased persons. It is probable that here, as in so many other cases—in *medio tutissimus ibis*—that there is truth on both sides, that in some diseases it may be the one, and in others the other, kind of germ. It would certainly appear probable that in splenic fever, chicken cholera, and the septicæmia of mice and rabbits the germ is a bacterium, for in each case it can be cultivated outside the body for several generations, and then injected with a degree of certainty approaching the absolute.

Dr. Barron, of Liverpool, has given much attention to this subject, and has made some very beautiful preparations illustrative of the presence of bacteria in various diseases.

Summing up on this matter, Professor Coats, in his recent work on pathology—one of the best and most recent works on the subject—takes it for granted that there is no other kind of disease germ than the bacterium. Referring to Koch's researches on the septicæmia of mice and rabbits, he writes: "When the blood is examined . . . it is found to contain myriads of minute bacilli . . . producing the disease which Koch calls the septicæmia of mice . . . and the septicæmia of rabbits is also produced by a bacillus, but one of larger size than that of the septicæmia of mice." [pp. 244-5-6.] And referring to Ogston's experiments with pus, he writes: "It would appear, therefore, from these observations, that the active agents in producing inflammations in the tissues are micrococci." [p. 239.] On pyæmia he writes: "It must be borne in mind that the emboli are infective, containing organisms which in some way produce an intense irritation, leading to necrosis and inflammations with a tendency to develop suppuration very rapidly." [p. 249.] And as to the joints in pyæmia, he writes: "In cases of the joints, also, if the micrococci once get admission to the interior, they are likely to multiply in the synovial fluid, and produce a general inflammation." [p. 251.] And of the specific fevers he writes: "There are several in which the evidence is tolerably clear that they are intimately related to bacteria as are the septicæmias of rabbits and mice."

[p. 253.] Of splenic fever (anthrax) he writes: "In this disease there is present in the blood ... a very definite form of bacterium, which is called the *bacillus anthracis* (p. 254). ... It is clear, therefore, that the disease stands in the same relation to this particular form of bacillus as do the septicæmias of rabbits and mice to theirs." [p. 255.] And he goes on: "In the next place, we have one of the acute fevers—*relapsing fever*—associated with the presence in the blood of a distinct micro-organism of a spiral form. ... That the disease depends on this organism seems to be established from the fact that it is always present in the blood during the acute stage." "*Typhoid fever* is another disease in which a special form of bacillus has been observed. ... This organism appears to stand in definite relation to the duration of the disease. [p. 256.] "And *erysipelas* is another disease in which bacteria have been found by several observers." [p. 256.] It will be seen by these quotations that Coats teaches that the bacteria are considered to be really the *causes* of the diseases referred to. And yet, as if himself somewhat in doubt on the matter, he writes: "Bacteria have been found in the tissues in a large number of acute diseases in man, and most of these belong to the class 'zymotics.' ... All that is asserted in the meantime is that bacteria have been observed in these diseases; it is not meant that each of these diseases depends necessarily on a specific form of micro-organism." [p. 252.] Dr. Klein, too, seems to be in doubt on this matter, for when referring to bacilli being found in inflamed tissues he writes: "Whether the presence and growth of these bacilli was the primary cause or only a concomitant symptom (due, for example, to the loss of active vitality of the tissue) remains to be proved." [*Practitioner*, vol. xxii, p. 409.] Now, Beale, on the contrary, appears to have made up his mind that the germs are in almost all cases, and certainly in all zymotic diseases, morbid animal bioplasts. Referring to *vegetal* germs, he writes: "The diseases of man and the higher animals known to depend upon the growth and development of vegetable organisms, are local affections confined to a part of the body not involving the blood; while, for the most part, the different forms of contagious fevers are general affections in which the whole mass of the blood, and in some cases every part of the body, is affected, and is capable of communicating the disease. ... In many of the diseases which are at this time considered to be actually due to the multiplication of vegetable germs, it is doubtful if the tissues and organs invaded were perfectly healthy at the time of invasion. ... In fact, it has been already shown that the fungi which commonly grow on the surface and in other parts of the body do not produce disease." [p. 77.] "In many different forms of disease," he continues, "these germs of bacteria, and probably of many fungi, are to be discovered in the fluids of the body, but the evidence yet adduced does not establish any connection between the germs and the morbid process. ... Their presence is due rather to alterations in the fluids consequent upon morbid changes, than that they are themselves the cause of disease. They follow the morbid change instead of preceding it." [p. 69.] "In cases in which these organisms have been discovered actively multiplying in the blood, that fluid must have already undergone serious changes, which had rendered it unfit for the nutrition of the body. I cannot agree with those who consider that we have evidence in favour of the view that the bacteria are really the active agents in cases in which the blood has been shown to exhibit the properties of a *specific contagious virus*." [p. 70.] "A disease germ," he continues, "is probably a particle of living matter derived by direct descent (degradation) from the living matter of man's organism." [p. 95.] He then figures the active living bioplast of pus, of vaccine, of variola, and of varicella, taken from the vesicles in these diseases, and remarks: "I think they consist of a peculiar

kind of living matter, the smallest particle of which, when supplied with its proper pabulum, will grow and multiply, giving rise to millions of little particles like itself, each having similar properties and powers." [p. 145.]

Now Beale is, perhaps, the greatest of microscope investigators of the minute structure of animal tissues and disease-germs, and one who has for years worked with higher powers than has any other investigator, except Dr. Drysdale and the Rev. Mr. Dallinger; while he is at the same time the author of perhaps the most complete treatise on the subject in any language. The powers ordinarily used by others appear to have ranged from 300 to 1,800 diameters, whilst those employed by Beale varied from 700 to 5,000 diameters; and he has for many years given especial attention to disease germs in all their relationships; much reliance may therefore be placed upon his conclusions.

And it certainly does appear to me much less probable that vegetal spores should cause typhus or gaol fever in man than that this disease should arise from animal germs, generated by over-crowding and by animal filth in prisons, ships' holds, and human habitations. When, however, such able and distinguished investigators disagree on the matter, we may well allow the question to remain in abeyance; nor is it necessary for us, as practical physicians, that it should be decided either one way or the other; we can go on treating disease quite as successfully whether we know the truth in this matter or not. Living germs being the cause of infectious diseases, and animal and vegetal germs being about equally resistant to our attempts to kill them, and both growing and multiplying in much the same way, it matters very little as to treatment, and even as to prevention, which they are; the same prophylaxis and treatment are required in both cases, and the factors are the same in both, viz., on the one hand the healthy or normal vital action of the individual, and, on the other, the disturbing germs. The normal vital action is the original impulse arising from the parents, and the germs are the foci of the morbid vital action of the sources of infection. The struggle is between these two motions or forces. It is, as it has been already asserted, the constant effort of the original impulse—the *vis medicatrix*—of the individual to maintain the original normal action of the organism when it exists, and to recover it after it has been deranged by any disturbing cause. Hence, in fact, the natural limitation of morbid processes and the frequent occurrence of spontaneous recovery. Were it not so, when once a morbid process has commenced, nothing but extraneous interference could prevent a fatal issue in every case; this, however, we all know does not occur.

As in almost all other instances, the physician's object in an attempt to cure any of the germ diseases should be to assist the natural tendencies just referred to; that is, to help nature to resist the action of the disturbing germs, and to restore to normal any disordered action. The question is: How can he best do this? As already mentioned, he need not attempt to kill the germs with ordinary germicides, for that this cannot be done has been demonstrated by the germ theorists themselves: nor can he purge them out, nor sweat them out, nor drive them out with diuretics, nor get quit of them by any other of the evacuant means usually put in force by the practitioners of the physiological school; there can be no *cure causam* here. Nor can the morbid process be diverted to some other or special part or organ by the use of derivatives, rubefacients, blisters, &c. There is, indeed, no place here for the use of any of the classifiable actions of drugs. As to medical treatment, there is, in fact, no sphere for the practitioner of the old school at all in any way; he is quite out of the race altogether, and can only stand by and watch. The germ theory is, therefore, no help to him, except so far as prophylaxis is concerned; he can have nothing whatever to do with the *cure* properly so called; the germ theory,

indeed, rather shunts than enthrones him. But does this last new pathological speculation on the nature of disease quite dispose of the claims of all physicians to be curers of disease? In the presence of it are all physicians mere cyphers, only to stand by and watch the struggles between the natural powers and the disturbing causes? Certainly not; far from it. Homœopathic physicians can go on curing disease now and in future quite as well as they have done in the past; and continue to show statistics of shortened illness and diminished mortality, not only absolutely but in comparison with the statistics of the old school, just as satisfactorily as ever. To homœopathic physicians pathological theories are minor matters. *As to the cure of diseases*, it is all the same to them whether the morbid state to be cured is of the nature of spasm, of asthenia, inflammation, or fever; or whether it be the result of some chemical or organic poison; or of the presence of living germs; of the loss of some constituents of the blood the germs may have removed, or some organic or chemical ferment they may have put into the blood. Whether the one or other, or all of these, makes little or no difference to homœopathic physicians, they know that the days of disease-entities has long passed away. Taught by Hahnemann, to them the patient, not some supposed pathological state, is the object of cure: to them, the patient presents deranged vital actions and altered bodily structures that require to be rectified, and to rectify these is their object and duty. How best to do this their leader, Hahnemann—interrogated Nature, and she replied: "Find a drug that will produce a similar derangement of the action and a similar alteration of the structure, and administer that in a quantity too small to induce any other derangement, or to aggravate the existing one, and I will do the rest." Hahnemann did these, and he found Nature faithful to her promise; and so, too, have his followers. To homœopathic physicians, therefore, each patient presents a morbid picture, to which they have to find a "simile" in the pure effects of one or more drugs; they must take into account not only the cause but the physical signs, the objective symptoms, the subjective sensations, and the mental perversions, with their course and progress and their conditions and concomitants, and not only in the patient but in the medicine also. And they must then administer the medicine pure and alone, in a reliable preparation and in a proper dose, with the necessary repetitions, leaving the rest to nature. It is for the physician to restore the conditions necessary for normal action, but it is nature only that can restore the action itself. So the physician is nature's handmaid, to help her to rectify herself with remedies of her own choosing; he is not her domineering taskmaster, to knock her about with alternatives, or to force her on and derange her operations with sudorifics, purgatives, diuretics and emetics, or to obstruct her operations with astringents, or to press her down and blind or paralyse her with sedatives and narcotics, or in any other way to thwart her tendency to preserve her own equilibrium. The true physician, if he can give nature no help, he will at least offer her no obstruction.

But we come now to the principal questions before us, viz.: Is homœopathic treatment as effectual in diseases originating in bacteria or bioplasts as it is in others where no such connection is traceable? That is, can homœopathic treatment with infinitesimal doses cut short infectious diseases dependent on living germs? Or, on the other hand, germs having gained entrance into the blood and there found suitable pabulum, will they run through their life history in spite of anything we can do—will they pass through precisely the same processes whether we interfere or not? If the growth and multiplication of germs can be interfered with, and the course of disease shortened or rendered less severe by medicine, are we sure that such results can be secured by medicines selected on homœopathic indications and administered in infinitesimal doses? And, if our medicines and

diseases do really shorten these diseases, or render them less severe, how do they accomplish their work?

To give a demonstrative reply to each of these questions separately would occupy too much of the valuable time of this meeting; I must therefore content myself with a general review of the whole subject, and one as brief as possible.

Before an assembly of physicians who have, some of you, for nearly half a century been in the habit of treating all varieties of zymotic disease, presenting every degree of malignancy, with medicines selected on homœopathic indications and given in infinitesimal doses, I need not advance one single argument in support of the fact that disease is shortened and rendered less severe in every one of the instances I have referred to. I need do no more than simply remind you of the frequent experience all of us have had of seeing these diseases rendered less severe, less prolonged, and less deadly by our treatment. We could, however, were it necessary, appeal to statistics in abundance, furnished even by our opponents; for wherever statistics have been collected they have shown unmistakably the power of homœopathic treatment to shorten the duration and diminish the mortality of disease.

In *rheumatic fever*, for instance, "our statistics," writes Dr. Hughes, "compare favourably with those of the old school. There, as you know, first the alkaline plan had been proved superior to all others in acute rheumatism, and then the results of pure 'expectancy' appeared to be equally good with those of alkalinisation. The conclusion was inevitable, that the latter was so much useless drugging, while the other methods were positively injurious. Our method, therefore, has to be compared with the expectant, and the result is that we shorten the average duration of the disease by from six to ten days." [*Therapeutics*, I., 143.] And we are all familiar with the much more rapid relief of pain and suffering, and the much greater freedom from cardiac complication under homœopathic treatment. In *acute pneumonia*—"true primary inflammation of the lungs—the 'croupous pneumonia' of the German pathologists," writes Dr. Hughes, "taken altogether they make the mortality of expectancy nearly 19 per cent., while that of homœopathy rarely reaches to 6." The mortality under the most modern treatment, expounded in Ziemssen's *Cyclopædia*, is 12 per cent., that of the late Dr. Hughes Bennett, 25 per cent., and that of the ordinary old-school treatment 20 to 30 per cent. [*Therapeutics* II., 165-6.]

The course, duration, and rate of mortality of the other germ diseases, when not interfered with by medical treatment of any kind, have not been sufficiently made out to allow of a comparison of their true natural history with their progress under homœopathy, so that the only way of judging of the facts is to compare the results under homœopathic treatment with those under what is known as allopathic treatment. For this purpose sufficient statistics are on record.

Time will only allow us to refresh our memories by reference to a few of these, so we will take three of the most deadly of the diseases referred to, viz., cholera, yellow fever, and typhus.

*Cholera*.—In this disease, in 1836, comparisons were made in Vienna, where the mortality was: under old-school treatment, 66 per cent., and under homœopathic treatment, 33 per cent.

In 1849 comparisons were made in Liverpool, where the mortality was: under old-school treatment, 46 per cent.; and under homœopathic treatment, 25 per cent. In Edinburgh, where the mortality was: under old-school treatment, 68 per cent.; and under homœopathic treatment, 25 per cent.

In 1853 comparisons were made in Newcastle, where the mortality was: under old-school treatment, 50 per cent.; and under homœopathic treatment

20 per cent. In London, where the mortality was: under old-school treatment, 51 per cent.; and under homœopathic treatment, 16 per cent. [Vide *Brit. Jour. Hom.*, x 41, 321—Dudgeon.]

In 1866 comparisons were made in Liverpool, where the mortality was: under old-school treatment, with astringents, 71 per cent.; with castor oil, 30 per cent.; and under homœopathic treatment, 15 per cent. [Vide *Med. Chir. Trans.*, L. 127—McCloy & Robertson; and *Brit. Jour. Hom.*, xxv., 90—Proctor.]

*Yellow Fever.*—In this disease, in 1850, in Rio de Janeiro, the mortality was: under homœopathic treatment, 7 per cent.

In 1853, in Philadelphia, the mortality was: under old-school treatment, 80 per cent. In New Orleans, the mortality was: under homœopathic treatment, 6 per cent. In Barbadoes, on board H.M.S. Dauntless, under old-school treatment, 50 per cent. [Vide *North Amer. Jour. Hom.*, III., 503.]

*Typhus Fever.*—In this disease, the average mortality is: under old-school treatment, 21 per cent.; and under homœopathic treatment, 10 per cent. Or, excluding complicated cases: under old-school treatment, 10 per cent. [Murchison]; under homœopathic treatment, 0 per cent. [Hughes, L., 72.]

So that, taking three of the most deadly of the germ diseases, homœopathic treatment with infinitesimal doses is: in *Typhus*, 11 per cent.; in *Cholera*, from 21 to 43 per cent.; and *Yellow Fever*, from 46 to 73 per cent. more curative than ordinary treatment.

Surely such statistics as these demonstrate plainly enough that homœopathic treatment with infinitesimal doses is effectual in germ diseases as well as in those not traceable to living organisms.

If it be asked: How do medicines selected on homœopathic indications and given in infinitesimal doses cut short infectious diseases dependent on living germs? The answer is:—In the same way that they cut short diseases dependent on any other cause, viz., by assisting nature to resist the disturbing germs, and helping her to restore the normal action and repair the damage done. And this assistance is rendered by using the remedies pointed to by the rule of similars: this rule nature herself revealed to Hahnemann.

As already affirmed, the germs having once gained entrance into the blood and tissues and found suitable pabulum, the removal of the cause, as this is ordinarily understood, is quite out of the question; it is absolutely useless to attempt to kill germs in the blood by the usual germicide treatment. This is candidly admitted by the best practitioners of the old school. Even in some of the parasitic diseases of the skin, where the germicide can be applied directly to the locality of the disease, Mr. Startin and other specialists admit that the germs cannot always be killed by ordinary germicide applications, and that some cases of these diseases cannot be cured at all by merely topical treatment, and they consequently recommend that we should place our main reliance on constitutional treatment, with the view of starving out the germs by altering the conditions under which they live. Hence in cholera, whose germs infect the intestinal canal, Koch has shown that they cannot be killed by the exhibition, or even by the injection, of germicides. And so also in the constitutional germ-diseases, such as typhoid fever, tuberculosis, relapsing fever, and even splenic fever, the internal administration of germicide drugs has been abandoned by the best practitioners; and such diseases are left almost altogether to sanitary measures, with rest and nourishment. Curative medicines they of course do not profess to have. Rest and nourishment, under sanitary conditions are, however, surely, not all the treatment to be expected from physicians—medicine men! They ought, at least, to endeavor

## Pathology, its bearings on Scientific Therapeutics.

how to alter the condition of the blood and secretions, that the germs might not be able to flourish in them. Different disease germs, like all other living things, grow and multiply under different conditions, and live on different kinds of food. Pabulum suitable for one kind—the yeast germ, for instance—will kill another kind, the pus germ, for example, and *vice versa*. In his Bradshawe lecture [*Lancet*, Dec. 16, 1882, p. 1020], Sir James Paget says: “Just as in agriculture, soils must be studied as well as seeds; seeds will not germinate in an unfit soil.” The blood that is food for some kinds of germs has been proved to be poison to other kinds. So that by altering the character of the blood we may destroy their means of existence. A very little, perhaps a mere atomic or metabolic change, may be sufficient to ensure their death. That very slight differences in the blood are sufficient to determine whether the germs shall live or not has been demonstrated by the germ theorists themselves; Koch, for instance, has shown that the germs of the septicæmia of the domestic mouse injected into the blood of the field mouse die immediately, and so with other germs and different animals—[Vide Coats, p. 260—264; also Green’s *Introduction to Pathology*, 6th edition, pp. 484—5 and 494—5]. And again, the germs of variola, morbilli, scarlatina, typhus, pertussis, and other infectious diseases, cannot live in the blood that has been already altered by an attack of the disease. Nor can the germs of variola live in the blood that has been altered by *vaccine lymph*; nor even those of anthrax, chicken cholera, or rabies live in the blood that has been altered by vaccination with attenuated virus, as Pasteur has shown. And it is also well known that the germs of ague cannot, as a rule, flourish in the blood that is under the influence of *quinine*; nor the germs of yellow fever in the blood that is under the influence of *crotalus*; nor the germs of smooth scarlatina in that under the influence of *belladonna*, nor those of algide cholera in that under the influence of *camphor*; nor those of suppurative inflammation in that under the influence of *hepar*; nor those of syphilis in that, under the influence of *kali bichromicum*; nor those of some epidemics of morbilli in that under the influence of *aconite*; nor those of vesicular erysipelas in that under the influence of *rhus*; and so on with all true homœopathic specifics. Homœopathic medicines are, in fact, substances that have the power to produce alterations in the blood analogous to different morbid states, so as to induce a kind of immunity, or at any rate a diminished susceptibility, in the manner, though perhaps not to the extent, of a previous attack of the disease; or after the manner of the attenuated viruses of anthrax, chicken cholera, rabies, vaccine lymph, &c.; or in the way of the physiological and medicinal antidotes to poisons, as *belladonna* to *opium*, *atropine* to *morphia*, *chloral* to *strychnia*, *alcohol* to serpent venom, &c. Those homœopathic medicines which produce changes analogous to the specific germ diseases are—the serpent venoms, some insect venoms, *belladonna*, *camphor*, *rhus*, *aconite*, *arsenicum*, *iodium*, *sulphur*, *quinine*, *veratrum*, *mercurius*, *hepar*, and some others. These are, therefore, the medicines that have the power to cut short germ diseases. And that they will do so, and have done so, I have already given ample evidence by statistics. Which of them to select, however, in any given case is not a matter of indifference, it is of essential importance, for it may be that only one of them is capable of producing the special change required, and to miss selecting that one might be to miss curing the patient. For instance, to cut short smooth scarlatina one particular medicine is required, viz., *belladonna*; but this will not cut short purpura miliaris, or morbilli; and to cut short hæmorrhagic scarlatina and yellow fever, *crotalus* is required; but this will not cut short typhoid, or relapsing fever; and so on. How the selection is to be made is, then, a very important problem; but nature has not left us helpless here, either; she has herself taught us how it is to be done, viz., the medicine chosen must be one the pathogenetic

*Recent Pathology, its bearings on Scientific Therapeutics*

effects of which resemble those resulting from the presence of the particular germ. How complete and perfect then, and simple withal is the science of therapeutics under the rule of similars ! The practical application of it may indeed often be unsuccessful, because it is in the hands of fallible human instruments ; but the science itself is as perfect as the provisions of nature usually are. Pathology and diagnosis being imperfect, and frequently unable to interpret the true nature of disease, the treatment based on them frequently fails and is disastrous ; but by a faithful narration by the invalid of his sufferings to an observant and educated physician, and the selection of the true simile, a cure may frequently be brought about *tuto cito, et jucunde*, whether the pathology and diagnosis be true or not. What an elevated position of superiority is, then, occupied by the physician who practises homœopathically ! Unlike his colleague of the physiological school, whose treatment is based upon the pathological speculation of the day, to the homœopathic physician, whether the germ theory or any other such theory be true or false, and whether the germs are vegetal spores or animal bioplasts, are matters of little moment ; he can go on relieving suffering, curing disease, and shortening convalescence all the same ! What a blessing to mankind ! And what a privilege and honour to himself ! Let the homœopathic physician, then, go on his way rejoicing ; and let him thank God that, though a martyr to professional prejudice, he is a conscientious scientific physician, and a benefactor to his race !—*The Monthly Homœopathic Review*, October 1, 1884.

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CROTALUS AS A REMEDY.

(Continued from p. 139 of No. 1)

As we saw in our last number recent chemical analysis has succeeded in separating more than one toxic principle from serpent venom. In the venom of the Crotalus Drs. Weir Mitchell and Reichert have found three principles which they have called *venom-peptone*, *venom-globulin*, and *venom-albumen*. We are not yet in possession of the details of their physiological experiments with these principles. So far as we can gather from the extracts given by Dr. Hayward from their article on the subject, published in the *Medical News*, of Philadelphia, in April 28, 1883, we see that they look upon the *venom-peptone* as a putrefacient, the *venom-globulin* "as a much more fatal poison, probably attacking the respiratory centres, and destroying the power of the blood to clot," and the *venom-albumen*, as "probably innocent." There is a good deal of vagueness, in these opinions, but with the aid of Dr. Wolfenden's experiments we arrive at something definite. Dr. Wolfenden made his experiments with the venom of the Cobra, and while he succeeded in separating two proteids analogous to Drs. Mitchell and Reichert's *venom-albumen* and *venom-globulin*, he has failed to detect anything like their *venom-peptone*. Dr. Wolfenden's experiments are decisive as to the toxicological

properties of the prôtéids he has separated. He has found the *venom-globulin*, or as he calls it the *globulin-venom*, to be asphyctic, destroying the life of the centre governing the respiratory process, and the *albumin-venom* to be paralytic, producing marked and progressive motor paralysis. Under the action of both these poisons the blood was found to be fluid, but there was no hæmorrhage anywhere, even at site of puncture. While these experiments directly establish the peculiarities of action of the *venom-globulin* and the *venom-albumen*, it indirectly corroborates the finding of Drs. Mitchell and Reichert about the *venom-peptone*, namely, that it is a putrefacient. And we can now understand how the predominance of one or the other of these principles in the venoms of different species of serpents can give rise to differences in their modes of action. Thus, for instance, the predominance, if not the exclusive presence, of the venom-peptone in *Crotalus*, is in all probability the cause of its characteristic effect on the blood and tissues, inducing hæmorrhages and extravasations. And its absence, or its presence only in infinitesimal quantities, in other serpent-venoms, notably in the Cobra, is probably the cause why these latter do not give rise to hæmorrhages at all, or much less frequently than the *Crotalus*.

Serpent venom, being an animal secretion, may vary in its composition with the varying conditions under which the animal may be placed. It is a popular belief in our country that in winter the serpent venoms are less energetic than in summer and the rains, probably from the long fasting of the animal in the cold season. The nature of the food may exert considerable influence in determining the composition of the venom. The parturient state, in the case of the female serpent, may also exert a modifying influence on the secretion. Repeated bites may exhaust one or more of the toxic principles. We believe it is these modifying circumstances upon the composition of serpent-venom which will explain the anomalies presented in cases of poisoning with the same serpent. The most notable anomaly on record is the case of Drake cited by Dr. Hayward (pp. 226-229), in which death was delayed so long as nine hours, and still on post mortem examination, the blood was not found to be fluid except in the cerebral sinuses, and in the vessels of the dura mater. "All the veins of the back of the (bitten) hand, and their tributary vessels were dissect-

ed up to the axilla, and ~~did~~ not present any alteration; they resembled perfectly in all respects the corresponding veins of the other arm. They contained no blood below the elbow; from the elbow as far as the axilla they contained disseminated clots. In the clavicular extremity of each axillary vein commenced a clot, moulded to the interior of the vessel, and reaching as far as the junction of the hepatic vein with the vena cava inferior, passing by the right auricle of the heart; this clot was homogeneous throughout and of only slight consistence, and nowhere was there any evidence of deposited fibrin; a large clot also filled the left auricle of the heart spreading into the pulmonary veins, but in the centre of this clot there was a band of yellowish fibrin, sixteen or eighteen lines in length, and such as is commonly found in venous clots.. *The blood did not flow from a cut made anywhere.*" In this case there was certainly no impairment of the power of the blood to coagulate. The details of the treatment pursued are not given, but so far as we have them, viz., cauterization of the bitten part and leeching, we cannot believe they had any influence in this direction. We are not told what the condition of the serpent was. We cannot help, however, believing that it was some peculiar condition in which the serpent was, probably long starvation, which was the cause of this remarkable anomaly.

With reference to its action on the nervous system, it must be evident from the experiments of Sir Joseph Fayrer and Dr. Brunton, in which so far as observed the heart was found to be beating after apparent death or cessation of the respiration, that the centre governing the respiratory process is the first to suffer the deadly shock of the Crotalus venom, and in this it resembles the Cobra. Whether this is the case in poisoning with all serpent venoms has to be determined. The effect of Crotalus is not confined to this particular effect on a particular portion of the nervous system. This is only its lethal effect, and as such effect is of therapeutic importance in so far as it indicates one mode of death, and is analogized only in the very rare cases when a man falls a victim to "an overwhelming dose of Asiatic cholera, yellow fever, small-pox, or scarlet fever poison, and death takes place before there has been time for symptoms to be observed or to become developed." In these cases the other serpent venoms

may be equally efficacious, but from the known tendency of the various diseases we may give preference to Cobra when we are sure we have to deal with cholera, and to Crotalus when it is yellow fever which has overtaken our patient. In the cases of small pox and scarlet fever we must be guided by the peculiarities of the prevailing epidemic, requiring either Lachesis or Crotalus. The previous history of the patient, if ascertainable, may also determine the selection of the particular venom.

It is not a little singular that while the action of the Crotalus venom when absorbed from the wound is so energetic and deadly on the nervous centres, the "topical application of the venom to the nerve *trunks* does not appear to produce any marked change in their structure or functions." What the action is upon the nerve-cells has not yet been, but ought to be, determined. The topical action upon muscle would appear to be very energetic and destructive. Summarizing from Dr. Mitchell's researches, Dr. Hayward says, "the wounded muscle begins immediately to tremble, quiver, or twitch; and in a very short time becomes soft and very easily tearable, even in the living body. After long contact it becomes almost diffuent and assumes a dark color and a jelly-like appearance, and under the microscope has the appearance of a minute granular mass, dotted with large granules. Muscular irritability is lost sooner than after any other mode of death." We are not told whether this action is produced in muscle only when in connection with the living body, or also when severed from it. For if the former, then it is doubtful whether the action is purely topical. If the latter also, then the action is undoubtedly topical, and is significant of the use to which Crotalus might be turned in muscular degenerations. But what is the nature of these degenerations. Further microscopic research is necessary to ascertain whether the granules are fatty, or aggregations of diffuent muscular substance.

The violent effects of Crotalus, noticed above, on the blood, on the nervous system, on muscle, point in a general way to the direction in which it may be useful in diseases the suddenness or violence of which bear analogy with them; but evidently their sphere of applicability is very, very limited, and we must turn to the less severe disturbances, the "contingent effects," produced by the venom, in order that we may use it in ordinary diseases

with the symptoms of which those effects correspond. It is not a little remarkable that Lachesis, notwithstanding its having been proved in high attenuations, remains a "better proved" drug than Crotalus, though the latter has had more research devoted to it. But this research has been more in the direction of physiological experiments on the lower animals than of provings in man. Besides, Crotalus has not been proved in higher attenuations than the sixth, simply from the reluctance of our modern scientific provers to prove higher attenuations under the belief that according to the present atomic theory matter cannot exist beyond a certain dilution (the 11th or 12th centesimal). Instead of allowing a theory to exert its influence in suspending all useful action, ought we not to keep the theory in abeyance pending the positive results of provings in all dilutions, at least up to the 30th centesimal? We cannot do better than obey the apostolic injunction of "proving all things," before rejecting what appears to be based upon experience. If actually there could be no matter in dilutions higher than the 11th or 12th centesimal, what becomes of the symptoms of Lachesis which were elicited from the 30th dilution, and which have been so often verified as to constitute it a "better proved drug" than the other serpent venoms? Deeply grateful as we feel to Dr. Hayward for having done so much for Crotalus, for having raised it as a remedial agent almost on a par with Lachesis, we cannot help thinking that he could have done more if he had not been swayed by the unverified calculations of the modern atomic theory. We would, therefore, earnestly request him to institute further provings with the drug in attenuations higher than he has already used.

A scientific comparison of analogous or similarly acting drugs, for purposes of therapeutics, is only possible when we have before us their provings under all doses from the crude drug up to a certain attenuation, with the symptoms assigned with precision to the particular attenuation used in the provings. For we must not forget that different attenuations of the same drug may develop different and even contrary or opposite symptoms in the same individual. Indeed, the fact seems to be that all the symptoms, which a drug is capable of giving rise to, excepting those which are violent, are not developed by the same dose, but

require different doses to develop them. There may be a few symptoms which may be developed under any dose. But we do not agree with Drs. Drysdale and Hayward in believing that all these so-called contingent symptoms are independent of the dose. Then again, as to contrary or opposite symptoms, it is an established fact that they arise from different doses,—constipation, for instance, resulting from one dose, diarrhoea from a different, a higher or a lower dose. Hence if one, A, of three similarly acting drugs, A, B, C, has been proved in all doses from the crude drug to the 30th attenuation, and the other two, B, C, only up to the 6th attenuation, then it must be obvious that A may appear to differ from B and C in having more symptoms, some of which at least might have been developed by the latter if they had been proved in higher attenuations. At any rate in the absence of such provings we would not be justified in differentiating A from B and C by the presence of *all* the additional symptoms. We therefore offer the following comparative study of *Crotalus*, *Lachesis* and *Cobra* with this reservation.

A comparison of the mental symptoms of *Crotalus*, *Lachesis* and *Cobra* shows that all three have lowness or depression of spirits and loss of memory. The depression of spirits is most marked in *Cobra*, and least in *Lachesis*. The loss of memory is most marked in *Crotalus*, least in *Cobra*. The loss of memory in both *Crotalus* and *Lachesis* is manifested by absurd mistakes in orthography, but it is not, as Dr. Hayward seems to believe, confined to this alone. It appears to be general, as is evidenced by symptom 4 (diffidence in the selection of medicines which previously had been a pleasant task) and by S. 11 (after getting into a shop had forgotten what she went for). All three have mental excitement, but it is most prominent in *Lachesis* and least in *Crotalus*. Hering, from repeated provings of *Lachesis* 30, experienced the following: "Impelled to productive work in the evening, although had been much fatigued during the day; sits up all night without the slightest sleepiness or exhaustion; writes with the greatest freedom and increased vigor about every thing he knows; new things constantly throng in his mind; also next day, after very little sleep, he is just as excited; it only gradually diminishes without subsequent reaction of mind." From triturating the venom and from 1st and 2nd triturations, he had

"increased power of originality in all mental work, increased activity of fancy: scenes and occurrences thronged to him in an unusual amount." Under Cobra one prover, after walking in the open air, felt "all dulness passed off, and was succeeded by an unusual state of excitement and energy, mental and physical, lasting the night, with a lively waking state; the excitement continued till next evening, slowly subsiding." Another prover felt more fit to work than he had done before. Under Crotalus torpor of the intellect is the uniform effect. One prover only had "heavenly sensations." The mental excitement in Lachesis is so great as to be accompanied by unusual loquacity, a symptom entirely wanting in both Cobra and Crotalus.

So far as recorded pathogenesis goes, loss of consciousness is common to the three serpent venoms, but delirium seems to be a characteristic of Crotalus. Hence in fevers, typhoid, typhus or low remittent, with delirium as a predominant symptom, Crotalus is more likely to be useful than either Lachesis or Cobra. And accordingly we have the testimony of Dr. Wallace that "the delirium of typhus, continued muttering, (typho-mania,) is almost immediately removed, and a serene mind, expressive of pleasure follows; melancholy is quickly changed into gay anticipations." Dr. MacKeechie has "lately used Crotalus with great advantage in a case of delirium tremens, where there was nearly constant drowsiness, but with the usual inability to sleep." The following case from the practice of Dr. Hayward also shows the power of Crotalus in this direction. "H. D.—, aged 69, during the incipient stage of senile dementia, was frequently and remarkably relieved by a few doses of Crotalus 6, of many of his mental delusions, such as mistakes in keeping his accounts and in writing letters, forgetfulness of figures, names, and places; awaking in the night struggling with imaginary foes; imagining himself surrounded by enemies or hideous animals; taking antipathies to the members of his family, &c., &c."

With reference to their effects on the sensorium, vertigo is a very slight symptom in Cobra, but a very marked one in both Crotalus and Lachesis. In Crotalus the vertigo does not seem to observe any periodicity, coming on shortly after the administration of the poison and is accompanied with nausea and even vomiting of bile, and sensation of discomfort on move-

ment; it is relieved by rest and lying down, and recurs from the slightest movement. In Lachesis the vertigo is predominantly in the morning after rising, showing that sleep under its action is so much disturbed that it not only fails to be refreshing but brings on positive discomfort. In the vertigo both from *Crotalus* and *Lachesis* there is a tendency to fall even to falling. In the *Crotalus* vertigo, there is no particular side to which there is the tendency to fall. In the *Lachesis* vertigo there is a tendency to fall towards the left side. The *Crotalus* vertigo is relieved by walking in open air; the *Lachesis* vertigo comes on as soon the patient goes out into the street. Closing of the eyes also brings on momentary vertigo under *Lachesis*. Both *Crotalus* and *Lachesis* are, therefore, likely to be remedial in vertigo, whether of cerebral, cardiac or blood origin, *Lachesis* getting the preference when the vertigo occurs chiefly in the morning after waking from sleep, *Crotalus* when the vertigo is worse from movement, from rising from the recumbent position, relieved by rest and lying down. As, however, in neither *Crotalus* nor *Lachesis* is the vertigo associated with noises in one or both ears, we fail to see its correspondence with Ménière's disease.

All the three serpent venoms under notice have headache, general but specially frontal. They have all headache on waking in the morning. *Crotalus* agrees with *Lachesis* in having the headache deep-seated in the left frontal lobe of the brain, accompanied with mistakes in speaking and writing, and therefore probably "involving the third convolution and disordering the faculty of language," as Dr. Hayward rightly guesses. This receives some corroboration from the fact that in *Cobra* the headache has less of this localization and the faculty of language has not been observed to be deranged. In *Crotalus* the headache is accompanied with a sensation as if the brain lay loose in the skull, a very peculiar symptom, wanting in *Lachesis* and *Cobra*. The headache, under *Lachesis* and *Cobra*, is accompanied with catarrhal symptoms in the nose, dry and fluent coryza. So far as observed, this does not appear to be the case under *Crotalus*. The *Crotalus* headache recurs and becomes worse from intellectual exertion. During the *Cobra* headache one prover had no inability to think or study. But a case is given by Dr. R. Russel in the *Brit. Journ. Hom.* xii, 224, in which *Cobra 2* proved curative though there was

“incapacity for much exertion of mind or body.” Hence the presence of this symptom would be no contradiction for Cobra. The Cobra headache is partially relieved in the open air, more by smoking tobacco, and altogether by alcoholic stimulants. Nothing of the kind is stated under *Crotalus* or *Lachesis*. From the way, however, in which alcoholic stimulants behave in poisoning with *Crotalus* and *Lachesis*, we suspect that the *Crotalus* headache is likely to be benefitted, and the *Lachesis* headache aggravated, by their use. A great characteristic of the *Lachesis* headache is that it is preceded, accompanied and followed by rush of blood to the head. The *Crotalus* and the Cobra headaches are accompanied by simply flushed face, but nothing like an actual rush of blood. They are also accompanied by cold feet, not so mentioned under *Lachesis*. Both the *Crotalus* and *Lachesis* headaches are accompanied by vertigo, nausea and vomiting, symptoms which are apparently wanting in the Cobra headache.

Dr. Hayward has cited the following cases of cure of headache communicated by Dr. Neidhard: Lizzie V—, headache all over, with high fever, mostly at night, with great drowsiness, also heat in forehead and burning in chest, headache aggravated by motion. Cured with *Crt.* 2. Hannah H—, the mother of four children, had over three years throbbing and heat in left side of head, with nausea, before menstruation. She sews much, and does house work; sometimes vomits green bile; urine high colored during the attacks. Cured with *Crt.* 30. M. K—, very severe neuralgic pain in right eye and top of head, on the right side down back of neck, at intervals, for twenty years. Pressure and heavy pain on the top of head from 6 a. m. until evening, for three days. Also some aching pain about right kidney and stomach. Various remedies were prescribed without benefit; *Crt.* 200, entirely removed the neuralgia. A A—, dull heavy pain over eyes and in sides of nose, also dull pressing pain at back of ear, heat in forehead, lightness of head in the open air, nausea and vomiting, with nervousness and depression of spirits. Cured with *Crt.* 400.

(To be continued.)

## REVIEW.

*The Knowledge of the Physician.* A Course of Lectures delivered at the Boston University School of Medicine, May 1884. By Richard Hughes, M. D. Otis Clapp and Son, Boston, 1884.

WE owe an apology to the author and the publishers of this charming little book for having delayed so long to notice it. The book consists of twelve lectures delivered at the Boston University School of Medicine in May, 1884. In these lectures the author has given, in his wonderfully lucid and luminous style, a view general and special of the Knowledge which the physician ought to possess. In the first four lectures we are presented with the Knowledge of Life, the Knowledge of Health, the Knowledge of Disease, and the Knowledge of Medicines. In the next four two very common diseases, Pyrexia and Rheumatism, are specially treated. In the three that follow the very intricate subject of cerebral localisation is treated with all the light of modern research. In the last, the future of Pharmacodynamics is handled with all the force and fulness of a master who has given to the subject the best work of his life.

Our readers are no doubt aware that Dr. Hughes is animated with catholic, unsectarian views with regard to medicine. In speaking of the duties of the homœopathic physician in his *Therapeutics* he has used the following noble words: "Our name is physician; homœopathic is but an *addendum*. We are priests of the one Catholic Church of Medicine, though the prevailing majority would fain deny our orders and invalidate our sacraments. They force us into a sectarian position; but they shall not inspire us with a sectarian spirit. We claim our inheritance in all the Past of Medicine, and our share in all its Present. We assert and use our liberty to avail ourselves of every resource which the wit of man has devised or shall devise for the averting of death and the relief of suffering. We know of no obligation superior to the paramount one of doing our best for our patients." Dr. Hughes, therefore, felt particularly gratified in having the honor of lecturing before a School, the only one of its kind in America, we believe in the world, where without committing itself to a belief in its finality, Homœopathy is taught as the most advanced point yet reached in the domain of therapeutics; and he thus

expressed his appreciation of the guiding principle of the School : "American homœopathy has always enlisted my warm sympathies ; but it has been with especial interest that I have watched the rise and progress of the Boston University School of Medicine, now in the second decade of its existence. That such a school should exist, without distinctive name, pledged to the method of Hahnemann only by the convictions of its teachers and the preferences of its—pupils, this makes actual my ideal of what should be."

We now proceed to present our readers with a rapid analysis of these lectures. In the first lecture the author discusses the problem of life. The physician has to deal with living organisms—he has to maintain their health, remedy their disorders, and postpone as much as possible the time of their cessation as living beings. To him, therefore, a knowledge of the structure and functions of living organisms must be essential. He must be able to distinguish living beings from beings that have no life. Now what is the characteristic, the *differentia*, of living beings? "It is not," says Dr. Hughes, "that they have a definite form, into which they inevitably grow, and to which they compel all increase of their substance ; for this property they enjoy in common with the lifeless crystal. It is not that they are the seat of motion. There is no rest anywhere in nature : if to move were to live, all things would be alive." It might be added, that the growth of crystals is not quite analogous to the growth of living beings ; for there is a limit to the growth of the latter, there is none to the growth of the former. A living being has not only a definite form but there is a limit to the dimensions of that form which can never be exceeded consistently with health. With indefinite supply of its own materials a crystal may and does grow to any dimensions, maintaining its peculiar, definite form. But that is never the case with a plant or an animal. There may be apparently some indefiniteness in the growth of plants, but this will be found on due consideration to be apparent only. The reason seems to be that in the case of minerals the growth is by addition only, whereas in the case of living beings there is the two fold process of addition and subtraction, of renewal and removal.

But there is analogy even of this growth and waste in living beings in the inanimate world itself. "Every wave upon the

cliff," says Dr. Hughes, "every shower of rain upon the land, is reducing one part of the earth to enrich another. In some places the land has risen, in others it has sunk, within the period of man's existence, and the whole geologic history before him is one of continual growth and waste." The analogy is apparent only. For, as the author goes on, "while, however, growth by accretion is thus a physical process, there is a growth which is purely vital. A granite rock to which chalk has been brought by rivers has no power of changing calcareous into granitic substance. But the plant and the animal, diverse as may be the structures of their several organs and the food supplied to them, can so transform this food within their bodies that it shall become homogeneous with themselves, and go to make their wood, leaf, bone and muscle, and contribute to the texture of such special organs as the brain and the eye. There is nothing like this, save in living beings: it is a purely vital process. And as their growth is not mere accretion, so the correlative waste in them is more than separation. Matter is thrown off from the tissues in lower forms than those in which it exists there: muscular fibre is eliminated as urea, nervous substance in the shape of phosphates." Living growth, or growth of living beings, is thus effected by *assimilation*, properly so called, and this is undoubtedly the first and grand characteristic of life. "The second is like unto it,—it is the reproduction of the kind." But is this latter process resolvable into the first. We think not; but Dr. Hughes thinks it is; "for," says he, "in the lowest forms of life generation is no distinctive process, but a simple fission or gemmation—a portion of the living mass becoming detached and then growing by assimilation into the parent form." But this fission, this gemmation, this detachment of a portion of the living mass is not assimilation. It has nothing in common with it, it is a distinct process, the primitive process of generation. Both these processes, then, growth by assimilation and reproduction are the two grand characteristics of all living beings.

But what is life? Is it the whole living organism or part of it, or is it a function of the organism? Paradoxical as it may seem it is easy to show that the whole organism, even when instinct with life, is not living in all its parts. No one can question that the excretions contained within it cannot, by any stretch of the imagination or of language, be called living. Into

the fluids of the body, intra- or inter-vascular, blood or lymph, disintegrated tissues are poured as waste products, and therefore these fluids cannot be living throughout their mass. But that they are altogether without life as water is, we cannot agree with Dr. Hughes in believing. They contain living germs in them, and so far they must be acknowledged to be living. Indeed, we are inclined to think that Dr. Hughes believes rather too implicitly in the sweeping doctrine first broached by Dr. Fletcher and since emphatically affirmed by Drs. Drysdale, Beale, and Allman, that all formed matter in the living body is dead, has passed from life to death; that for instance, "hair, nails, teeth, bone, are when once formed as lifeless as similar matter existing elsewhere; and the same demonstrably, though not so obviously, true of cartilage, fibre, cuticle, and all cell-walls and sheaths." Admitting with Prof. Allman that "wherever there is life, from its lowest to highest manifestations, there is protoplasm; wherever there is protoplasm, there also is life," it does not follow that life is confined to this protoplasm, that outside of it there is no life. Is protoplasm of uniform composition throughout in a living organism, or is it not? In the simplest organism, as the amoeba, it must be admitted to be of uniform composition; and in a complex organism, as man, the same admission must be made, otherwise we shall have to face the insuperable difficulty of protoplasms of different compositions originating from the same source. Now if protoplasm be of the same uniform composition in the same living organism, how happens it that the different tissues and organs draw their own material from it, unless they had themselves the power of assimilation, that is, unless they had life in them? If it is said that each tissue has its own protoplasm which draws its own material from the general protoplasm, how came the specific protoplasms to be separated from it? We are inclined to think that too much has been made of this protoplasmic matter, and too little of the structural, or what are called formed, elements of the organism. It is not easy to draw the boundary line between living and dead. All boundary questions are obscure, and apt to lead to dispute, and war, at least of words. But this much may be safely said, that so long as there is power of assimilation, of selecting its material from the pabulum, probably from the

general protoplasm, and of exchanging old with new matter, so long there is life. This receives corroboration from the success of the surgical feats of transplantations of skin and other structures from one place to another.

But still we are quite in the dark as to what life is. Whether we believe protoplasm to be the only living matter in living organisms, or extend the property of life also to the structural elements outside of it, we have yet to determine what it is which constitutes the peculiar power of assimilation and reproduction with which living beings are endowed? Is it a separate principle which with intelligence or instinct uses the protoplasm and the tissues by which it is surrounded for manifestations which we call living; or is it a mere function of the peculiar arrangement of matter constituting the living organism? Philosophers from the earliest ages are divided on this question; one class holding the view of a separate vital principle, the other looking upon life as a mere expression of work done by living organisms under certain conditions. In the fourth edition of his *Organon*, published in 1829, Hahnemann said that "the organism is indeed the material machine to the life, but it is not conceivable without the animation imparted to it by the instinctively perceiving and regulating vital force, and the vital force is not conceivable without the organism, consequently the two together constitute a unity, although in thought our mind separates this unity into two distinct ideas, for the sake of facilitating the better apprehension of it." From this passage, Dr. Hughes endeavours to show that with Hahnemann up to 1829 the vital principle was no distinct entity but a "force," the mode of motion of the living organism. But the epithet, "instinctively perceiving and regulating," applied to the vital force, seems to us to be fatal to this inference, and shows that Hahnemann even at this time, as he subsequently more decidedly, was a believer in the separate existence of the vital principle "as the spiritual force, the dynamis, that animates and rules the body with unbounded sway."

Dr. Hughes' criticism of Hahnemann's conception of life as a force appears to us to be wanting in his usual lucidity. He characterises this conception as lacking scientific warrant, though philosophically tenable. In the present day one is hardly prepared to hear of a distinction between science and philosophy.

Besides, the distinction drawn between forces and properties of matter does not seem to be in correspondence with modern ideas. "The forces," says he, "are affections of matter, modes of its motion, correlative and interchangeable among themselves." These are called matter's casual affections. Matter has other qualities. These are its "*inherent properties*, which make it and its various forms what each essentially is. According to its properties it is influenced by the natural forces: its chemical affinities determine how it shall act under chemical attraction, its responsivity to magnetism makes it advance towards a magnet when presented to it." Hence then we have chemical affinities and responsivity to magnetism described as *inherent properties*, whereas chemical attraction and magnetic attraction are understood to be natural forces, or casual affections of matter. Need we say that chemical affinity implies chemical attraction between two substances which are capable of uniting chemically, and that the responsivity to magnetism is but another name for induced magnetism in magnetic substances; that therefore what are called properties of matter are as much forces as the so-called forces themselves; and that they must be all *inherent* in matter. There is nothing casual in nature. The epithet cannot have its place in the vocabulary of science. Interchangeability of forces among themselves never take place at haphazard but are always after some definite laws, and must be inherent in matter. It must be evident, therefore, that when we have called life a property, we have said that it is a force, only that it is not a separate entity independent of the organism, but resulting from the peculiar arrangement of its parts, and capable of responding in a peculiar way to external stimuli, the responses themselves being but different manifestations of force in the presence of other forces. The external stimuli or forces do not appeal in vain to dead organic matter, as Dr. Hughes supposes. Dead organic and inorganic matters respond to them as certainly as living organic matter does, the difference is only in the manner of response. Allured by the attractiveness of the subject we have devoted the whole space at our disposal to a consideration of the matter of the first lecture, but even this we have not been able to bring to a conclusion. We must, therefore, ask the indulgence of our readers to follow us in our next.

## EDITOR'S NOTES.

## HOW CHLOROFORM CAN BE PRESERVED FOR A LONG TIME

The Paris correspondent of the *British Medical Journal* for Dec. 6, reports that M. Regnault after much investigation has found that chloroform, when exposed to the influence of sun light, decomposes after an interval of two days in the month of July, and five days in the month of December. The bottle experimented on contained chlorine vapour, hydrochloric acid, and phosgene. Chloroform, in contact with air, but removed from the influence of sunlight, continued pure for more than fifteen months. Exposed to the sun it remains pure, if surrounded by an atmosphere of nitrogen entirely free from oxygen. M. Regnault has also ascertained that ethylic, amylie, and acetic alcohols can arrest decomposition in different degrees, benzene and toluene have a similar action; that of benzene is feeble, but toluene preserves chloroform during a year or more.

## DISINFECTION OF THE SPUTUM IN PHTHISIS

According to Koch, the dried sputum of tuberculous patients imparted tuberculosis to guinea-pigs after preservation up to three months. After five months the inoculation sometimes failed, and after eight months there were no results. Schull and Fischer made experiments on the disinfection of fluid sputum from phthisical patients, using the inoculation into guinea-pigs as a means of control over their results, which were as follows: (1) Decomposition for many weeks did not deprive the sputum of its specific virulent properties. (2) Steam passed over dried sputum sterilised it in from half an hour to an hour. For fluid sputum fifteen minutes sufficed, and hence the application of steam may be recommended. (3) Perchloride of mercury solution (1 to 1,000, or even 1 to 500) failed altogether. (4) Absolute alcohol (5 parts to 1 of sputum) was not absolutely certain in its sterilising effects. (5) Carbolic acid (5 parts of a 2½ per cent. solution to 1 part of sputum) was without effect, but was efficient in a 5 per cent. solution. (6) Saturated aniline water required to be added in tenfold quantity to sterilise the sputum.—*Centr. f. Klin. Med.* quoted in the *Practitioner* for Nov. 1884.

## THE RELATION OF THE THYROID GLAND TO MYXŒDEMA AND CRETINISM.

In his "Brown" lectures, Dr. Victor Horsley showed the following relation to exist between the thyroid gland and myxœdema and cretinism.

1. The thyroid gland appears to consist of two distinct portions : (a) glandular, having the function of excreting mucin (?); (b) highly vascular lymphoid nodules, having a (?) hæmatogenous function.

2. Excision of the gland is followed by an increase in the amount of mucin in the tissues, an increase in the activity of the muciparous glands, and the assumption of a muciparous function by glands which usually yield no mucin.

3. Excision of the glands is followed by profound changes in the blood. A steady fall in blood pressure and in the number of red corpuscles. Leucocytosis accompanies and keeps pace with the oligæmia. Mucine, which is not a normal constituent of blood, is present after thyroidectomy.

4. Excision of the gland is followed by nerve symptoms, indicating changes in the lowest motor centres, which cause tremors, with rigidity and paresis, as well as alterations in the higher cortical centres with the production of imbecility, and ultimately death in the comatose state.

## COMPARATIVE MORTALITY OF CITIES.

Dr. Grimshaw, the Registrar-General for Ireland, at the Sanitary Congress of Dublin, gave the following comparative statement of death-rates of the great towns of the world, compiled from the average of a series of years :—

Christiania	..	19.9	New York	..	27.7
Philadelphia	..	20.6	Vienna	..	27.9
Edinburgh	...	21.4	Dublin	...	27.9
London	...	22.0	Venice	...	28.5
Baltimore	..	22.2	Rome	..	28.6
Geneva	..	22.6	Berlin	..	29.0
Brooklyn	..	23.6	Calcutta	..	30.9
The Hague	..	24.6	Breslau	..	31.2
Copenhagen	..	24.8	Naples	..	31.4
Dresden	..	25.1	Munich	...	34.0
Brussels	..	25.4	Trieste	...	34.1
Hamburg	...	25.8	Bombay	...	34.8
Amsterdam	..	25.9	Buda Pesth	...	37.1
Rotterdam	...	26.1	St. Petersburg	...	42.1
Paris	...	26.4	Alexandria	...	42.4
Turin	..	26.8	Madras	...	48.0

## PRINCIPAL REMEDIES FOR THE TREATMENT OF CHOLERA INFANTUM.

*Aconite* is one of the most important remedies in the active stage. Vomiting, purging, semi-stupor; hands and feet cold as though they had been placed in ice-water. Head and bowels congested, simulating congestive chill, with tendency to paralysis of the heart.

*Cham.* Seldom indicated except in mild cases when the child is fretting, etc., or when a bath is not followed by proper reaction, with mucous stools.

*Argent. nit.* Stools like finely chopped spinach and scattered over a large space on the napkin. *Aconite*: like large choppings of grass and discharged like blast of wind and water.

*Calc. carb.* Oppressed by the process of teething. Screams almost frantically; gums inflamed.

*Ratanhia.* When the child has large, watery and very fetid stools, worse in the morning.

*Psorinum.* Fætor of stool worse than with *Ratanhia*, clinging to the clothing even after thorough washing; condition worse at night.

*Mag. phos.* In brain cases the best remedy, others, as *Acon.*, *Bell.*, etc., must not, however, be neglected in this class of cases. In spasms, meningitis and most ailments of the nervous system, no matter what the origin, *Mag phos.* acts well—*The Hahnemannian Monthly*, November 1884.

## THE ACTIVE PRINCIPLES OF ERGOT OF RYE.

Dr. R. Kobert, Assistant in the Pharmacological Institute of Strasburg, has contributed an article to the *Practitioner* for December, on the active principles of ergot which he has found to be three in number, and calls them *ergotinic acid*, *sphacelinic acid*, and *cornutin*.

1. *Ergotinic acid* produces paralysis commencing in the spinal cord and ascending to the brain. It never causes either uterine contraction or gangrene. Even after excessive doses it produces tingling in the tips of the tongue, indicating the beginning of paralysis of the spinal cord. It causes dilatation of the blood-vessels through paralysis of the vaso-motor centre, and consequent lowering of the blood pressure.

2. *Sphacelinic acid* produces symptoms of gangrene. In the digestive canal there are swellings of the solitary glands and Peyer's patches which may lead to their breaking or necrotic detachment. On the uterus it acts by causing contractions, producing genuine tetanus of the uterus. It causes the blood-vessels to contract and hence the blood pressure to rise.

3. *Cornutin* in cold blooded animals produces spasmodic rigidity of muscles which ends in degeneration. In warm blooded animals it causes salivation, vomiting, diarrhoea, and active movements of the uterus. The uterine contractions are not tonic but clonic. The blood vessels contract and the blood pressure rises under its influence.

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RESULTS OF THE ENGLISH CHOLERA COMMISSION.

The following results have been arrived at by Drs. Klein and Gibbs by their recent investigations of cholera in Bombay and Calcutta :

1. The statement of Koch that "comma bacilli" are present only in the intestines of persons suffering from, or dead of, cholera, is not in accordance with the facts, since "comma bacilli" occur also in other diseases of the intestines, *e g.*, epidemic diarrhoea, dysentery, and in intestinal catarrh associated with phthisis.
2. The "comma bacilli" in acute typical cases of cholera are by no means present in such numbers and with such frequency as to justify Koch's statement that "the ileum contains almost a pure cultivation of comma bacilli."
3. The "comma bacilli" are not present in the tissue of the intestine or elsewhere.
4. The "comma bacilli" in artificial cultivations, carried out by one of us (E. R.), do not behave in any way differently from other putrefactive organisms.
5. Mucus-flakes of the ileum, taken out soon after death from typical acute cholera, contain numerous mucus corpuscles, many of them filled with peculiar minute straight bacilli. The same bacilli occur also outside the mucus-corpuscles. They are never missed, even when the "comma bacilli" are.
6. No bacteria of any kind, and no organisms of known form and character, occur in the blood or any other tissue.

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MICROCOCCI IN RELATION TO WOUNDS, ABSCESSSES, AND SEPTIC PROCESSES.

Dr. Watson Cheyne gives the following summary of his interesting report on micrococci in relation to wounds, abscesses, and septic processes (*Brit. Med. Journ.*, Oct. 4, 1884):—

1. There are various kinds of micrococci found in wounds treated aseptically, differing markedly from each other in their effects on

animals. They agree in growing best at the temperature of the body, and in causing acidity and sweaty smell in the fluids in which they grow.

2. The micrococci tested in these experiments grew best in materials exposed to oxygen gas. They grew only with difficulty in the absence of oxygen. Eggs were not good pabulum.

3. Their effect on animals was not altered by growth with or without oxygen.

4. The effects of these micrococci on rabbits and man were not similar, some of the most virulent forms for rabbits causing no deleterious effect in wounds in man.

5. The kidney is apparently an important excreting organ for organisms.

6. Organisms not capable of growing in the blood may yet cause serious effects by growing in the excretory canals. This may explain some cases of pyelitis.

7. Where an organism is not markedly pathogenetic, it may be necessary to introduce a large quantity before morbid changes are set up.

8. Suppuration is not always due to micrococci, it may be caused by chemical irritants, such as croton-oil.

9. Micrococci are always present in acute abscesses, and are probably the cause of them.

10. In some cases, the micrococci are the primary cause of the inflammation and suppuration, as in pyæmic abscesses; generally, however, they begin to act after inflammation has been previously induced.

11. This inflammation may be caused by an injury, by the absorption of chemically irritating substances from wounds, by cold, &c.

12. There are several different kinds of micrococci associated with suppuration.

13. Micrococci cause suppuration by the production of a chemically irritating substance, which, if applied to the tissues in a concentrated form, causes necrosis of the tissue, but, if more dilute, causes inflammation and suppuration.

14. The conditions in wounds and abscesses are not the same, inasmuch as in the former there is opportunity for mechanical and chemical irritants to work.

15. There is no reason for denying the existence of "antiseptic suppuration."

16. Tension may also cause suppuration, but it is perhaps most frequently aided by the growth of micrococci. These organisms need

not be of a very virulent kind. It is also probable that the products of inflammation are themselves irritating and capable of exciting or keeping up inflammation.

17. The micro-organisms of septicæmia, of pyæmia, and erysipelas, are different from one another and from those of abscesses. In erysipelas, the micrococci grow in the lymphatic spaces. In pyæmia, they grow in the blood to form colonies and emboli. In septicæmia, they may only grow locally, the symptoms being due to the absorption of their ptomaines; or if they grow in the blood they do not form colonies and emboli. Septicæmia may also be due to other organisms besides micrococci.

18. There are no facts to support the view that it is the same micrococcus which, under different conditions, causes these various diseases. The experiments of conversion of innocent into malignant forms, and *vice versa*, are unreliable.

## CLINICAL RECORD.

### *Cases of Puerperal Eclampsia.*

By BABU AMAR CHAND MUKERJEE, M.B.

*Case 1.* Babu K. C. Mookerjee's daughter-in-law, aged 16, a primipara of good health, was delivered of a female child, after a somewhat protracted labor, on the morning of the 24th Oct. 1884. Just five minutes after delivery, her body became quite rigid, the face wore a horrible look, her features distorted and eyeballs upturned, the hands were firmly clenched and the thumbs bent inwards upon the palms and the whole muscular system was thrown into rapidly recurring convulsive spasms. When I saw her first a few minutes after, she was quite insensible, the pulse nearly imperceptible at the wrist, heart sounds almost inaudible, breathing embarrassed and the extremities quite cold. I gave her Brandy with musk every quarter of an hour. After three doses, she had another fit and I prescribed the following mixture.

R

Pot. Bromide ʒiiss.

Chloral Hydras ʒi.

Tinct. Digitalis mxv.

Aq. Camphor ad ʒiv.

*M. Ft. m.* 6 doses, one every 3 or 4 hours, and Brandy in drachm-doses with warm milk every hour.

5 P. M. Had two fits at the interval of half an hour, after the first dose of the Bromide-mixture; pulse better, is quite sensible; ordered the mixture every six hours and Brandy every three or four hours.

25th Oct. Doing well; is a little feverish; had no fits since yesterday; had a refreshing sleep; omitted all medicines.

26th Oct. Is all right.

*Case 2.* Mohanta Dass's daughter-in-law, aged 15, a primipara, of plethoric constitution, in the full term of gestation, had been suffering from convulsions since 3 A. M. of the 25th Oct. and was delivered of a male child at 7½ A. M. I was called in at 8 A. M., when I found her getting fits almost every quarter of an hour, since parturition, ordered the bromide and chloral mixt. as in case 1 and the fits disappeared after the first dose. The patient made a good recovery after two days.

*Case 3.* Roop Chand Māl's grand-daughter, aged 13, a primipara, in the 9th month of gestation, suffering from convulsions since the morning of the 26th Oct., was placed under my treatment at 11 A. M., when I found her in the following condition. The face and the feet œdematous; conjunctiva injected; pulse weak; os still undilated; the fits coming on at intervals of half an hour and succeeded by total unconsciousness. I prescribed the bromide and chloral mixture (without digitalis) every two hours, and brandy in drachm doses with warm milk, as in the preceding cases.

9 P. M. Information was brought to me, that the patient had been, all of a sudden, delivered of a living child at 5 P. M.; the intensity of the fits is much the same, although the interval is a little longer; the coma is more profound.

27th Oct. 8 A. M. Found the patient a little prostrated; pulse very weak; had no fits since yesterday eve; consciousness has returned, but is unable to speak through sheer exhaustion; omitted the Bromide mixture and ordered brandy in drachm doses with broth, every two hours; bran-poultice over the hypogastrium and warm milk in small quantities frequently repeated.

28th Oct. 8 A. M. Is doing well; lochia quite free: the child died last night.

*Case 4.*—Das's daughter, aged 12, a primipara of robust constitution, was attacked with convulsions on the 31st December 1884. Two doses of the bromide and chloral mixture checked the fits, and the patient was safely delivered, two days after.

*Case 5.* Hara Chandra Teor's daughter (who had an attack of cholera ten months ago, vide case vi, *Cal. J. Med.*, p 16, vol. xii), aged 26, a

multipara, of healthy constitution and in the full term of pregnancy, suddenly fell down insensible at 11 P. M. on the 16th January 1885. Half an hour after, she shewed symptoms of Eclampsia. I was called on the morning of the 17th when I found her quite unconscious and getting violent fits almost every ten minutes. The face and the extremities (specially the former) were a good deal swollen; there was spasmodic rigidity of the jaws and clenching of the teeth; gurgling in the throat, pulse weak and slow, pupils normal; prescribed *Bell.* 3, every hour.

5 P. M. Found her quite comatose; no reflex movements on scratching the soles of the feet or pinching hard any other part of the body; face flushed, bluish-red and bloated, lying insensible on the back, with stertorous and rattling breathing; body bathed with profuse cold perspiration, abdomen tympanitic; pulse small and slow; inability to swallow even a drop of water; no labor pains; os still undilated; ordered *Opium* 3, one pilule dry on the tongue, every hour, and warmth to the extremities.

11 P. M. Symptoms much the same; can swallow liquids now, though with great difficulty; ordered *Opium* 3, one drop every hour.

18th Jan. 8 A. M. Coma remaining much the same; involuntary evacuation of urine and feces, breathing more embarrassed, with blowing of the cheeks and loud gurgling sound, delivered of a still-born child at 2 A. M. Omitted *Opium*, and ordered *Arnica* 3, every hour.

10 P. M. Coma more profound, with louder stertorous breathing; œdema of the face less; rigidity of the limbs and rolling of the head from side to side; lochia free; retention of urine; breathing anxious and oppressed; impossibility to rouse the patient; quite insensible to all external impressions; the face covered with a profuse, cold sweat; omitted *Arnica* and ordered *Opium* 3, every hour.

19th Jan. 4 P. M. Found much better; coma less; made water; cannot speak but feels when pinched, vacant look; ordered *Bell.* 3, every 2 hours; bran poultice over the hypogastrium; milk for diet.

20th Jan. 8 A. M. Screaming since last night and talking incoherently; attempts to escape from bed and bite; is very turbulent; ordered *Stram.* 3, every hour or two.

10 P. M. Symptoms much the same; gave *Pot. bromide* and *Chloral Hydrate* gr. xv. in each dose, every six hours.

23rd Jan. Less boisterous; cries every now and then; continue *Chloral* and *Bromide* mixture, thrice daily.

28th Jan. Is all right.

## Remarks.

From the foregoing clinical notes, it will be seen, that out of five cases, occurring in my practice within a period of three months, four were treated with *Potassium bromide* and *Chloral*, and were good illustrations of the efficacy of these two drugs in convulsive disorders, and the last (the gravest of the five) was treated on homeopathic principles. The symptoms, presented by the first case, were due, most probably, to anæmia of the brain, resulting from loss of blood; there was œdema of the face in cases II, III, and V, and although the urine was not examined, the eclampsia in these cases might be traced, according to the theory of Traube and Rosenstein to the hydræmic condition of the blood and its consequent pathological effects. Case V presented the worst symptoms of cerebral apoplexy, which were however admirably removed and the patient saved, from the very jaws of death, as it were, by *Opium 3*, the cure, however, was completed by *Pot. Brom.* and *Chloral Hydrate*. There was no history of epilepsy or hysteria, in any of these cases, nor were there any precursory symptoms. It is very remarkable, that the first three cases occurred on three consecutive days, without any definable cause—a circumstance, which reminds us of the words of Bachr, that “at certain periods, the disease occurs with more than usual violence, without atmospheric or other causes, being at the bottom of it.” As regards the obstetric management, it will be seen, that no interference was necessary in any of these cases, as the delivery took place speedily and quite unexpectedly, attesting the soundness of Gooch’s sage advice, “attend to the convulsions and leave the labor to take care of itself.” There was no delay in the expulsion of the placenta in any of these cases.

## THERAPEUTICS OF CONSTIPATION, DIARRHŒA, DYSENTERY, AND CHOLERA

### 73. COPAIVA.

#### **Constipation.**

1. Insufficient sts.
2. No st. for five days. Constipation, with nettlerash and fever.
3. Sts. like sheep's dung
4. Sts at first dry and formed, and ending in diarrhœa

#### **Diarrhœa :**

1. D. of whitish fœces, especially in the morning, with coldness and drawing tearing in the abdomen, which obliged him to bend double, before and after an evacuation.
2. Whitish fecal sts of a sour smell, with discharges of ascarides.
3. Violent D. in one night, with spasm at the stomach, coldness of the extremities and cramps in the calves
4. Several soft sts. followed by general prostration
5. Thin sts. without pain and without urging, there seems to be an increase of secretion of mucus in the rectum
6. Involuntary diarrhœic st
7. D. accompanied the exudation from the skin
8. Excessive nausea with diarrhœa. Copious, liquid sts.
9. D. alternating with obstinate constipation.

#### **Dysentery .**

1. Frequent excretion of fœces which are at first shaped, but afterwards pasty, at last mucous, mixed with blood.

#### **Aggravation .**

1. Morning

#### **Before St.:**

1. Coldness and drawing tearing in abdomen obliging him to bend double.
2. Cutting pains

#### **During St .**

1. Coldness and drawing tearing in the abdomen obliging him to bend double
2. Spasm of stomach, coldness of extremities, cramp in calves

#### **After St :**

1. Coldness and drawing tearing in abd obliging him to bend double.
2. General prostration.

#### **Rectum and Anus**

1. Spasms of the rectum.
2. Pressing in the rectum, causing a constant urging to st
3. Stitches in the rectum.
4. Bleeding piles.
5. Constant oozing from the anus, of a serous or even purulent fluid.
6. Burning itching at the anus.

#### **General Symptoms :**

1. Unconquerable dislike for his usual employment.

2. Disgust for life and at the same time fear of death.
3. Peevish, irascible, morose, intolerable temper during a whole week, with ebullition of the blood, heat of the head, and trembling of the hands from the least contradiction.
4. Paleness and sickly look of the face. Bloating of the face.
5. The tongue is covered with a whitish coat, green at the base.
6. Dryness of the mouth, especially at night and in the morning.
7. Sudden and profuse flow of sweetish saliva.
8. Bitter taste in the mouth. Every article of food seems too salt.
9. Excessive hunger, then loss of appetite. Loathing of food.
10. Thirst and diminished appetite.
11. Eructations and hiccough after eating. Eructations sour, foul or tasting of the ingesta.
12. Nausea, vomiting and weakness of the stomach.
13. Gastro-enteritis. Disorders of the stomach during menstruation. Spasms of the stomach. Burning in the stomach.
14. Rumbling with flatulence. Emission of extremely fœtid flatus, in the morning, in bed, and after rising.
15. Gripping and pinching in the abdomen.
16. Violent cutting pains, followed by diarrhœic stools immediately after taking a cup of *café au lait*. Colic and looseness.
17. The urine is discharged drop by drop. Retention of urine. Bloody urine, strangury and ischuria. Burning in the urethra, when urinating. Albuminuria. Discharge of a milky, acrid discharge from the urethra, with painful micturition.
18. Trembling of the limbs. Twitchings in the limbs, during rest.
19. Drowsiness in the day time. Restless sleep at night.
20. Eruptions on the skin. Urticaria; pemphigus, or small white milium vesicles on a red base, pustules like smallpox. Discharge excessive, offensive and viscid.

**Remarks :** So far as we can gather we do not think *Copaiva* has yet been used in bowel complaints, though the symptoms it has produced of constipation, diarrhœa and dysentery well entitle it to be thus used. The stools become *whitish* under its use, showing that it acts upon the liver so as to arrest its secretory function. Hence we have, in the color of the stools, the key-note as it were to its use in disorders of the bowels.

## 74. CORNUS CIRCINATA.

### Constipation :

1. St. hard, dry and scanty, with slight pressing in the rectum.
2. St. scanty and dark colored, and attended with burning pain at the anus.
3. Very early in the morning was obliged to get up to relieve the bowels, but could do nothing at all satisfactory, or which gave relief, the discharge consisting of only a few slimy lumps, and being attended with pressing and smarting at the anus.

**Diarrhœa :**

1. Large, loose, and dark st., with griping, tenesmus ; small and somewhat loose evacuation, with burning at the anus and discharge of offensive flatus.
2. Copious, thin, and bilious discharge from the bowels, relieving fulness in the head, the evacuation was succeeded by slight tenesmus and considerable burning at the anus.
3. Very offensive st. of a bilious character, and rather loose. Dark thin st. with slight tenesmus on rising in the morning.
- 5 St. thin and scanty with pressing pain in the rectum, smarting at the anus after the discharge, dull feeling in the head, drowsiness and lassitude
6. St, thin and scanty, attended with some tenesmus, griping in the umbilical region, rumbling of wind, and copious discharge of offensive flatus.
- 7 Awoke in the morning with headache, distension and dull pains in the bowels, and urgent desire to go to st. ; during the evacuation, which was thin, of a dark green color, and very offensive, the pains became more acute and there were slight symptoms of tenesmus ; the discharge was accompanied with copious emissions of foul smelling flatus
- 8 Pain in the pit of the stomach during eating, with distension of the bowels from wind, which were relieved by a loose, windy, dark and bilious st., immediately after dinner.

**Dysentery :**

- 1 Frequent inclinations to go to st. but no satisfactory discharges, the result being a quantity of dark and slimy fluid and much offensive flatus.

**Aggravation.**

1. Morning. On rising in the morning
2. After dinner.

**Before St.**

1. Headache, distension and dull pains in the bowels, and urgent desire for st.

**During St**

1. Tenesmus.
2. Burning at the anus.
3. Discharge of offensive flatus
4. Griping
5. Pressing down sensation in the rectum.
6. Smarting at the anus.

**After St :**

1. Smarting at the anus
2. Drowsiness and lassitude.
3. Burning at the anus.
4. Relief of fulness, of head, of pain and distension of stomach and bowels.

**Rectum and Anus :**

1. With urging to st., there was a bearing down pain in the abdomen.

**General Symptoms :**

1. Depression of spirits    Peevishness
- 2; Reads without appreciating the meaning of words ; inability to concentrate the mind upon any subject. Confusion of ideas. Forgetful of little things.
3. Dark circle around the eyes
- 4 General expression indicative of great physical and mental depression    Sallow countenance
5. Burning of the face, hands and feet.
6. On rising, in the morning, felt a burning sensation over the whole face, feeling as if it was flushed, but without redness of the cheeks
7. Tongue covered with whitish or yellowish-fur.
- 8 Mouth and throat dry    Insipid, pungent, bad or bitter taste    Aphthous stomatitis
- 9 Loss of appetite    Aversion to all kinds of food and drink. Aversion to meat and bread.    Desire for sour drinks.
10. Bitter, and empty eructations.
- 11 Nausea with feeling of debility and languor
- 12 Distension of the stomach and bowels with wind
13. Sensation of burning, fulness and oppression in the stomach and bowels
14. Distension of the bowels with griping pains.    Rumbling    Emission of very offensive flatus
15. Griping in bowels, with inclination for st., but could not effect anything
- 16 Urine scanty and red ; has to pass water oftener than usual
- 17 Great prostration of the mental and physical energies.
18. Drowsiness ; almost irresistible desire for sleep.

**Remarks** Dr. Marey, who introduced the drug to the notice of the Homœopathic School in 1855, values it very highly in bilious diarrhœa and dysentery, in which, especially when associated with aphthæ, it deserves a more extended trial than it has met with.

75. **CROTALUS.****Constipation :**

1. After an attack of diarrhœa, the bowels were costive and evacuations hard, during a week
2. Bowels constipated.

**Diarrhœa :**

1. D. with headache and cold feet, preceded by pain in hypo- and epi-gastrium, followed by constipation
2. Frequent diarrhœaic sts., with pain in abdomen from navel downwards.
3. Frequent diarrhœa, increased secretion of mucus in nose and œsophagus ; and pains in larynx and other parts of the body ; accompanied by several curious mental symptoms.
4. Pappy (mashed or pasty) st.
5. Involuntary st. of dark bilious color.

6. Watery diarrhœa, colic and tenesmus,, with excessive thirst and repeated attacks of vomiting. There was also occasionally great restlessness with some twitching.
7. Involuntary evacuation of urine and st.
8. Bowels acted loosely, with grey discharge, and there seemed to be some tenesmus in the rectum. (Dog.)

### **Dysentery.**

1. Passed slimy and bloody sts. in abundance. At intervals much tenesmus. The dysentery continued and increased, and he suddenly passed at least four ounces of dark grumous blood. Blood lost its power to coagulate. (Dog.)
2. Liquid and very dark sts. Dark semifluid excrement, streaked with blood, with much thirst. (Dog.)
3. Discharge of excrement, involuntarily, tinged with blood. (ib.)
4. Passed some very albuminous urine, and a large amount of blood mixed with the fœces. (Rabbit)

### **Rectum and Anus**

1. Tenesmus

### **General Symptoms.**

1. Remarkable weakness of memory, makes mistakes in writing; does not spell correctly.
2. Loss of consciousness. Next day had no knowledge of what had been done for him shortly after a bite.
3. Great languor and delirium. Great restlessness and anxiety.
4. Declares himself in great agony and groans frequently.
5. Along with sensitiveness to noise and various hæmorrhages, her temper was dreadfully irritable and cross, so that the least annoyance sent her into a fury; this was very contrary to her natural disposition.
6. Vertigo with nausea and sensation of discomfort on movement.
7. Nearly comatose; surface cold; pulse imperceptible; heart beats 55, respirations 14, and laboured, constant vomiting.
8. Sudden paleness of face; and on attempting to sit down he fell over. There was general relaxation of the muscles, and total loss of movement and power: his head hung upon his chest: there was stertorous breathing, syncope, and involuntary evacuation of urine and fœces, with cold extremities.
9. Extreme sinking and faintness.
10. Several times on attempting to walk a few yards he was seized with nausea and vomiting.
11. Vertigo, frontal headache; pain above eyes and in temples, worse on right side, with malaise, bilious vomiting, and a necessity to lie down, associated with constipation. Better after a walk in open air.
12. Pain in whole head; great anxiety and uneasiness; violent thirst and diarrhœa, oppression of chest; and violent burning pain in trunk, increased by touch.
13. Violent pains in front part of head, followed by vomiting.

14. The lad was delirious ; his hearing was dull, his eyes were closed—upper lids and superior recti paralysed—the pupils were slightly dilated and were insensible to light, and vision was apparently lost. The pulse, respiration, and temperature were much affected, and there were thirst, vomiting and purging.
15. Flushed face, injected conjunctiva, epiphora ; bitter taste, drowsiness, coryza and oedema of face ; jaundice, yellowness of the sclerotic coat, and shivering.
16. Face discoloured, eyes sunk and almost extinguished, countenance deathly pale.
17. Face drawn, voice very weak, tongue with white fur, considerable oppression and anxiety.
18. Head and face prodigiously swollen and the latter black. His tongue was proportionably enlarged, and protruded out of the mouth. His eyes were as if shooting from their sockets. His senses were gone. And there was every appearance of immediate suffocation.
19. Submaxillary, parotid, and all the glands about head and neck, greatly enlarged.
20. Sour taste in mouth after an ordinary breakfast
21. Taste for salt blunted ; he drank a glass of salt and water but did not taste it salt.
22. Tongue swollen to nearly double its normal size, and several bloody sts.
23. Dry tongue and incessant thirst, with dry consuming fever. Great thirst, drinking large quantities of water
24. Difficulty of speech followed by difficult deglutition, anguish and copious perspiration on chest
25. Heart-burn the whole day, especially afternoon, with sensation as if whole oesophagus up to mouth were filled with rancid fluid, with eructation tasting of ingesta Eructation of sharp sour fluid, after eating some white bread.
26. Nausea and malaise, and feeling as if something rancid rose up to oesophagus.
27. Nausea and malaise after meals, increased by standing or walking, relieved by sitting.
28. Nausea and vomiting on attempting to walk.
29. Nausea with headache. Vomiting with giddiness.
30. Pain in stomach after breakfast and dinner ; and in the morning the stomach felt sore and tender, worse after food ; urine scanty and red, followed by headache. Flatulence and eructation.
31. Extreme pausea and vomiting on least exertion ; vomiting of food and medicine.
32. Incessant vomiting and insatiable thirst, drinking cold water every few minutes.
33. Constant retching to vomit, though but little was ejected.
34. Vomiting of grass green, or yellowish green, foetid ejecta.
35. Continuous thirst, hiccough, bilious vomiting, palpitation of

- heart, anxiety, rapid weak pulse, languor, and rapid failure of vital powers.
- 36 Violent vomiting, purging and urination. Vomiting, tenesmus and strangury existed without intermission. Thirst excessive, the water he drank was immediately ejected or passed in enormous quantity of limpid urine. Extremities cold, pulse weak and slow. Bloody mucus passed per anum; and he expectorated about half an ounce of a bright florid colour, with the sputa. Extremely restless; threw all his clothes, and rolled about on the ground, the pain being concentrated at the epigastrium.
  - 37 The patient had repeated attacks of sickness, vomiting at first portions of undigested food mixed with a greenish fluid, then of thick viscid mucous like white of egg slightly stained yellow. There was one copious emission followed by only small quantities of very pale urine. At the same time a watery diarrhœa set in, with colic and tenesmus, and excessive thirst.
  38. Cannot bear the clothes round stomach and below hypochondria.
  - 39 Violent pain in course of colon
  - 40 Urine somewhat increased and of very high colour, a reddish yellow. Copious and frequent urination.
  41. Urine albuminous, bloody.
  - 42 Heaviness in arms and legs, as if the bones were made of heavy woods.
  43. Along with delirium, drowsiness, and twitching, deafness and blindness, thirst, vomiting and diarrhœa, there was paralysis of both upper extremities, particularly below the elbows, and, to a less degree, of the lower limbs also.
  44. Extremities cold and insensible, body perfectly motionless and covered with a cold viscous sweat.
  45. Uncommonly sleepy. Sleeplessness

**Remarks** As has been well remarked by Dr Hayward, "*Crotalus* exerts an idiopathic action on the digestive tube throughout its whole length: producing, in the mouth and œsophagus, congestion, hæmorrhage, œdema and pain, in the stomach, thirst, want of appetite, eructation, nausea, vomiting, hæmorrhage, and pain; and in the bowels, congestion, inflammation, hæmorrhage, diarrhœa, dysentery, the stools being frequent, liquid, bloody, dark, grey, involuntary; accompanied by tenesmus, and sometimes copious hæmorrhage; and frequently by nausea, vomiting, fainting, prostration. After death, in subacute and chronic cases, the mucous membrane of the whole intestinal tube is found to exhibit signs of congestion and inflammation, with extensive ecchymoses; and filled, especially the large gut, with blood and mucus" The therapeutic applications from this pathogenetic action must be obvious; but the actual clinical experience with the drug has been as yet very scanty. The following case has been recorded by Dr. Hayward:

**Hæmorrhage.**—**Mr. S.**—, aged 60, in October, 1882, on using paper after stool, noticed fluid on it; and on looking, found it was blood. Had noticed himself out of health and work for some time; and with nausea and faint feeling. He consulted his usual (allopathic) attendant, who ordered first infusion of roses and sulphuric acid, then turpentine; and afterwards oak injections, all without benefit. In consultation, the leading physician in Liverpool said he failed to detect structural disease, that it was simply a case of hæmorrhage; and he increased the strength of the astringent injection. ~~At~~ However, to no purpose; the hæmorrhage went on increasing. On being seen by the present writer, December 13th, 1882, it was found that the bleeding was dark and fluid, and occurred now also on standing and walking, appearing to be a simple oozing of dark fluid blood. The only other symptoms were debility, faintness, and some aching in left iliac region; with depression, anxiety, and lowness of spirits. Bowels, as a rule, rather relaxed. *Crt* 3, in water, every three hours; ordered early in the morning. December 14—Reports that all yesterday he felt as if a commotion were going on inside him, especially in left chest and left side of abdomen, he slept, however, at night better than he had done for years and felt much better of himself this morning, and found he had lost the aching pain he had in the left iliac region. Urine is free but high coloured, and muddy with lithates, which had not been the case for a long time. Has had a healthy stool preceded by some dark blood, and some blood was on the paper; there had been no oozing, and he felt wonderfully better himself. Continue *Crt*. 16th—Reports that he feels wonderfully better; has had three stools, and with the last one scarcely any blood; and has had no oozing at all. 19th—No evidence of blood yesterday or to-day. Continue *Crt*. three times a day. 30th—Has had no evidence of bleeding, and feels quite well.

In a recent case of chronic diarrhœa we derived remarkable benefit from **Crotalus**. The case, that of an elderly lady, came to our hands after treatment by the old school, European and Indian, and was in every respect a very bad case from the obstinacy of the diarrhœa. There was considerable improvement from *puls*, *sulph.*, &c. But the tendency to recurrence from the slightest error of diet could not be remedied, and the case gradually became so bad again that we nearly despaired of her life. Ulcerations broke out in the gums, tongue, and other parts of the mouth, with oozing of fluid blood from the ulcers. This led us to think of **Crotalus**, and a few doses wrought a wonderful change in the whole constitution. The oozing of blood ceased, the ulcers healed, the diarrhœa improved remarkably, and the patient appeared to have had new life infused into her. One symptom remained, namely, liquid stools mixed with hard lumps, for which we gave **Conium**. This seemed to aggravate, and we gave *spt. ether nitric.* as an antidote which had the desired effect, and the patient is now all right. Notwithstanding these supplementary medicines which have completed the cure, there is not the slightest doubt in our minds that but for **Crotalus** she could not have lived.

## Gleanings from Contemporary Literature.

### WHAT IS "FITTEST" IN HOMŒOPATHY AND LIKELY TO "SURVIVE"?

By W. S. SEARLE, A.M., M.D., PRESIDENT.

*Annual Address before the Medico-Chirurgical Society of New York.*

\* \* \* \* \* SIXTY years have elapsed since the introduction of Homœopathy into this country. To those whose lives have been of equal or greater duration, this does not seem very long. And yet, sixty years cover no inconsiderable portion of the world's history. Looking backward over five such periods, we behold America a perfect wilderness. Thirty such lives take us back through the entire course of modern civilization—even to the Christian era. Sixty years, then, embrace no small portion of the history of medicine. And for that space of time Homœopathy has been on trial in this country.

Now, if I correctly read the "signs of the time," the present may be justly considered a transition period in the history of this form of medical art. Whatever is true in Homœopathy, what has stood the test of modern scientific thought and experiment is gradually being accepted by the medical profession in general. And what is fanciful and false has been or is being rejected by the homœopathic school itself. The long civil war is over, the line of battle is broken; the pickets are fraternizing; the generals exchange courtesies. As the years pass on, and new generations spring up, the old factional bitterness is subsiding; progressive men of both sides are joining hands in the pursuit of common objects; freedom to practice the art of healing in accordance with the conscience of each individual begins (though tardily) to follow in the wake of freedom in the worship of God.

At least, the truce has sounded: proposals for an honorable peace are under consideration; and, while here and there a "Ku-Klux-Klan" may exist, some doughty old Quixotes still sound their trumpets, buckle on their armor, and start some wind-mill fiacas on their own account, the war is virtually over.

At such a time it is natural to look back over the field, number the wounded and slain and call the roll of the living.

In this battle of the pill with the pellet, of the plaster and potion with the potency, what, on the homœopathic side, has survived the strife, and is to be incorporated into the platform and practice of the future physician?

In discussing this subject, let us first recall what have been the main dogmas of the school of Hahnemann.

1. That *similia similibus curantur* formulates a method of cure which, supplemented by surgery, is applicable to and effective in curing all forms of disease.

2. That in order to obtain a definite and invariable knowledge of the properties of drugs, it is necessary to test their action upon healthy men and animals.

3. That the processes of trituration and succussion develop latent medicinal power in all drugs.

The other tenets of Hahnemann cannot be said to have been held by more than a faction of the school—certainly not within the past quarter century.

Those named we will consider in their order.

Much worldly warfare has been waged over the question whether the Hahnemannian formula embodies a method, a rule or a law. The author himself speaks of it as a mode of cure founded upon what he claims to be a law of nature—viz, that two similar diseases cannot exist at one time in the same body.

Occasionally, both in the *Organon* and his essays, he employs the word law, but when he comes to strict definition he always selects the word mode and method. However these terms may have been employed, it cannot be denied that Hahnemann regarded this as the only and universal rule or mode of cure. Attempts at cure in any other way were fallacious, useless, harmful. His condemnation of the therapeutics of his day was severe, contemptuous, almost savage. Nor was his language concerning it undeserved, as all, of every school, will now admit.

For many years the majority of his disciples held to the universality of this *modus medendi*, with the sole exception, made by him, in regard to surgical measures, adding, perhaps the elimination from the stomach and bowels of poisonous or other offending substances—a proceeding, in its nature, really surgical.

Failures to cure by this method were attributed to the imperfection of the materia medica itself, or to a lack of knowledge thereof on the part of the prescriber. By most practitioners palliatives, such as the employment of narcotics or anodynes, as well as external stimulants or emollients, were also admitted. Still, on the whole, the main endeavor of the homœopath has been to find the *Similimum* in his materia medica, and upon it he has depended for the cure of his patients.

But as time has elapsed, the more candid of this school—the broader and freer thinkers, have come to still further limit the application of the Hahnemannian method. And perhaps no more clear, concise and comprehensive statement of the sphere of the homœopathic formula has ever been presented than that given by Dr J. P. Duke, of Nashville, Tenn. Although this may be familiar to most of you, you will pardon a rehearsal of it here.

Dr. Duke entitles it "The Domain of Similia"

1. "It relates to nothing but affections of health.
2. It relates to no affection of health where the cause is constantly present and operative.
3. It relates to no affections of health which will cease after the removal of the cause by chemical, mechanical or hygienic means.
4. It relates to no affections of health occasioned by the injury or destruction of tissues which are incapable of restoration.
5. It relates to no affections or health the likeness of which may not be produced in the healthy by medicines or other agencies.

#### AFFIRMATIVELY.

It does relate to all human affections similar to those produced by drugs and other agencies, existing in organisms having the integrity of tissue and reactive power necessary to recovery, the efficient causes of the affections having ceased to operate.

Looking again, and this time in the direction of medicines and other agencies capable of influencing the human organism as to health, we may say—

1. That Hahnemann's law relates to the action of no agents affecting the organism chemically, mechanically or hygienically.
2. It relates to the action of no agents destroying the parasites which infest the human body.

Looking over the *armamentarium* of the therapist for those agents not thus excluded, we find one class remaining—viz, those agents which

affect the human organism as to health in ways not governed by the laws of chemistry, mechanics or hygiene, producing ailments similar to those found in the sick."

No more admirable statement of the sphere of similia has ever been formulated. And yet, in one particular, it appears to me to be inexact. I refer to the relations of our method to what are termed zymotic diseases.

Dr. Dake may claim that, in excluding all affections of health where the cause is present and operative, he covers this ground. And, construed strictly, he does so. But I apprehend that such was not his intention. My expression is that he simply meant to imply (for example) that one could not reasonably expect to cure dyspepsia while the patient persisted in eating indigestible food. But is it not equally true that the homœopathic method is not applicable in the treatment of zymoses?

If whooping cough, for instance, is caused by a fungoid spore, as is claimed, which, entering the mouth, thus infects the system and if, as is farther claimed, and as I think I have witnessed, this spore can be killed, and the disease cured within a week by the occasional application to the tongue of a little sulphate of quinine, even after sufficient time has elapsed to render the diagnosis certain, if all zymotic forms of disease are thus caused by germs which enter the body, and derange its healthful action, surely we are to look to germicides, and not to homœopathic treatment, for their cure.

To the effects of such infections our method may be, and doubtless is, appropriate. That is, when the germ has ceased to propagate its kind, when the storm has spent its fury, there remain, of course, a variety of disturbances— even organic changes, perhaps—which have always been enumerated among the essential phenomena of the disease. These, undoubtedly, are in suitable relations with our mode of cure. But just so far as any disease is zymotic, the true aim of the physician must ever be to discover the drug which shall be most destructive to the causative germ, and, at the same time, least harmful to the organism. This having been effectively employed, the results of the disease fall rationally within the domain of general rules or methods of cure.

Genuine zymotic diseases are instances of poisoning, and differ from what are ordinarily so classed only in the fact that in the one the poison is organic, and, in the other, inorganic. This is also true of *sepsis*, and these remarks are intended to include septic infection.

While, in most instances, the germs which produce this class of maladies still remain undiscovered, and the substances inimical to them unknown, the homœopathic is as applicable to their treatment as any other method, but none can be said to be really appropriate.

I would, therefore, exclude from the sphere of similia all forms of true zymosis and sepsis.

This limitation probably disposes of several forms of disease which have always been the *opprobrium medicorum* of the homœopathic school. Inter-mittent fever, syphilis, gonorrhœa, septicæmia, *et cetera*—how many physicians are there hardy enough, fool-hardy enough, to attempt the cure of these affections in a strictly homœopathic manner? Who would meet cholera without camphor in sensible doses, the use of which, upon homœopathic grounds, in doses of any size, cannot be defended?

Even so late as 1831, nineteen years after the promulgation of the *Organon* by Hahnemann, and while he was advising his disciples all over the world to confine themselves to the use of the thirtieth dilution in acute disease, we find him directing that a drop of the tincture of camphor should be given every five minutes in the incipient stage of cholera; that it should be rubbed into the skin freely, and that even two tablespoonfuls of the same should be given by enema. No "thirtieths" for him in this zymosis—for as such he regarded it.

Pardon me if, *apropos* of this, I digress here to remark how the shade of Hahnemann must laugh—or weep—to behold his fanatical worshippers, in the light of the science of this day, bowing at the shrine of the Organon, and burning there the incense of their devotion. A bold and progressive spirit was his while still on earth. Is it less so now? Do they dream that, if he lived to-day, he would republish that Organon as it stands? A wonderful work for the year of grace 1810, to be sure, containing much that is eternally true, but far from the inspired and infallible revelation that these fanatics would make it.

But to resume. If you will investigate the books of our Boards of Health, as I have done, you will become convinced that Homœopathy has little of which to boast in the management of typhoid fever, since the old school has renounced the drugs it once poured down, and has resorted to an almost expectant treatment. If the exhibit appears to be better in scarlet fever, measles, small-pox, etc., I think candid consideration will render it probable that any difference in our favor is mainly due to two things—viz., the persistence of many of the old school in the employment of heavy doses, and the real superiority of the homœopathic method in the sequelæ of these diseases.

If my views of this matter are incorrect why should the superiority of the homœopathic method be so much more clearly and decidedly evident in pneumonia and other non-zymotic diseases?

In tuberculosis we fail quite as badly as the regular school. But Koch tells us, and with considerable array of demonstration, that here again we have a zymosis.

Time and investigation may prove that some of these maladies now accounted zymotic really are not such. I think, on the contrary, that the field of germ disease is rather likely to widen. But, however this may be, the treatment of such affections must ever remain primarily antitoxal and palliative—homœopathic only secondarily and consecutively.

It is manifestly improper to attempt any argument as to the truth of the doctrine of *similia*. It is not a subject for argument. One might as well argue about the truth of the "rule of three." It is (*first*) a question as to the existence of such a therapeutic rule or law. (*Secondly*), a question as to feasibility in its application. (*Thirdly*), a question as to its rank among the rules or methods of cure. And all these questions can be decided only by experiment, not by argument—by trial, not by discussion. After deliberate, and, so far as possible, unprejudiced trial of all modes of treatment for nearly a quarter of a century, I believe in its existence, in its feasibility as a rule, and in its superiority when feasible. Any physician thus will believe who faithfully tries it after sufficient education in the method to enable him to make a fair experiment.

I have known those who, unskilled in the homœopathic materia medica, and untrained in the proper mode of selecting the remedy, have made hasty and superficial trials and failed to realize their expectations. But never have I heard of a physician who came to the task with suitable preparation, and who gave the method of Hahnemann a fair trial ~~within~~ its legitimate domain, who did not become fully convinced that here he had found what was true, and therefore enduring in medical art. Such men, as honest, as competent, as judicial in temper as any in the profession, may be numbered by the thousands in the homœopathic ranks. Thousands more, in the old school, are to-day practising a more or less modified form of Homœopathy. And the advocacy of treatment which will bear no other name, becomes constantly more frequent in old school journals. The proof is abundant that mere argument in these premises is useless and out of place, but careful and painstaking experiment has always sufficed. Could the entire profession be induced to make such trials and abide by

the results, I firmly believe that the essentials of Homœopathy would be universally accepted within a single year.

And, judging from the current course of events, this attitude of mind is beginning to prevail in the profession. Prejudice, *a priori* judgment and blinding passion are being laid aside. And so surely as this occurs, the verity and practical value of the methods of similars will meet with general recognition. So much of Homœopathy will be enduring. So much of truth in medical art has been attained, and will remain a part of the living principle of medicine under whatever name it may survive, under whatever blaze of science medical art may hereafter stand.

The second tenet of Homœopathy is that all scientific treatment of disease must be based upon a fixed and definite knowledge of the properties of drugs, and that such knowledge can only be obtained by experiment with them upon healthy human beings and animals.

Ah! here we have at once the glory and the shame of Homœopathy. Glory—in the truth of the proposition, and the rich fruit already derived from its even partial development. Shame—that in the seventy years since Hahnemann so nobly sacrificed his ease and comfort in this labor, the *materia medica* has been so little developed. The number of drugs which have been properly and completely proven is, to say the least, very limited, if, indeed, there is one. In the very large majority of instances the provings are meagre, have been most imperfectly conducted, worse recorded, and buried in a heap of unreliable symptoms. And this is the fault and shame of the homœopathic school.

Still, the realization of a complete *materia medica pura*, such as Hahnemann inaugurated and his followers have lamely and slowly evolved, is no holiday task.

Think what is necessary to an ideal proving. A sufficient number of healthy men and women, of various temperament, under control as to their diet and habits, of sufficient medical education to express their sensations in proper and accurate language, a laboratory where their excretions can be analyzed, their various organs from time to time examined by experts, and last, and by no means least, competent physiologists and pathologists to sift, interpret and record the results in their proper sequence.

Then the study should be pursued into the pathological realm. Animals should be poisoned by the drug under trial, and thorough *post mortem* examinations, both microscopic and macroscopic, made. Shall we ever live to see such provings?

And yet upon this pathogenetic basis Homœopathy stands and must stand.

No homœopathic treatment without pathogenesis. No perfection in homœopathic treatment without a perfect and complete *materia medica*. Some such realization of perfection in proving, some approach, at least, to such completeness must be attained before the method of Hahnemann can reach its full fruition—before the practitioner can hope or expect to depend upon it alone, even within its limited domain.

It would ill become one who has done so little in this direction as myself to undertake the labors of those who have toiled in this field. Many worthy attempts at proving have been made under the best attainable conditions, and deserve high praise. Among these those of Hahnemann himself still rank high—perhaps highest. Have you ever tried to conceive the amount and duration of this portion of the work of that noble and masterful mind? Engaged in constant, scientific study; struggling with a poverty unknown to the poorest mechanic of this favored land; overborne, in contests with enemies, who were determined to crush him by legal or illegal means; harassed by the care of a rapidly increasing *clientèle*, he yet found time and courage to prove upon himself and his friends upward of

fifty drugs, to collate and record the results. And to-day no more accurate and trustworthy provings exist in the *materia medica*. You, who have achieved the proving of even a single drug, can best estimate this Herculean labor.

Wonderful man! How eminent was his genius! How manifold his knowledge! How unswerving and persistent his will! How enthusiastic his faith!

Hippocrates, Galen, Hunter, Jenner, Harvey, Louis—each was great and noble, each an ornament to his profession; each in his way and time a gift of God to man. But not one of these had broader and deeper thinking; not one had loftier (though different) genius; not one had higher obstacles in his pathway, not one achieved a work of greater benefit to his fellow men. Let the ignorant sneer at and deride his very pardonable errors. The day will never dawn when intelligent physicians shall cease to admire him and honor his memory.

But, it may be asked, why victimize men in tedious and difficult pathogenetic experiments? Why not prove drugs exclusively upon animals, ascertain the pathological changes produced, and reason from this basis?

For several evident reasons. In the first place, animals differ from the human kind in organism, and pathologic facts derived from them can, therefore, never be more than confirmatory and explanatory. Then, animals cannot express their sensations under experiment. Again, lethal doses produce only coarse effects. They cannot bring out the finer points of a proving, and thus give us symptoms corresponding to the incipience and variety of disease.

But, if this be true, no less so is it that pathogenetic trials upon men demand pathologic experiments upon animals to illustrate, explain, precisionize what is obtained from the former. They complement each other. One, the etching, the outline, which the other shades and colors and makes life-like—both essential to a complete drug portrait.

Similar remarks apply to the records of accidental poisoning. This "hair of a thousand strings" gives but a single shriek when struck by a hostile hand with force enough to demolish it—it wails minor and plaintive strains when the strokes are light and repeated.

The only remaining source from which a knowledge of the properties of drugs has been derived is their apparent influence upon the sick. This, and instances of poisoning have been the sole roots of the *materia medica* of the old school. On these alone it stood; from these only could it grow. And its history, almost up to the present hour, sufficiently attests the inadequacy and inaccuracy of such sources. Ages of empiricism had partly disclosed the therapeutic relations of a few drugs, such as quinine, arsenic, opium, etc., but knowledge of the most was so imperfect, and opinions regarding their action so contradictory that their employment in practice was unsatisfactory, uncertain, variable. With every new edition the old *materia medica* opened its front door to about as many fashionable newcomers as were at the same time kicked out at the back door, discarded as useless. Many a rough diamond has been picked up out of their debris-heap and in the homœopathic workshop polished into a sparkling and priceless gem. But eminent men in the old school have derided its *materia medica* in stronger terms than even I should be ready to employ. Prof. Holmes, in his oft-quoted address to the Mass. Med. Society, only voiced the sentiments of the more caudid and judicious among his contemporaries.

- I presume many of you, like myself, have a vague recollection of the "variables" and "constants" that so bothered our youth in the study of calculus. I helped my brother seniors to bury that abomination, and it is little of it, thank God, that I remember at this day. But one lesson there inculcated still sticks fast in my memory, viz., that no equation is capable

of a definite solution which does not contain at least one "constant" quantity.

No in the problem of cure—given the sick and the medicinal power of drugs, to cure any specific malady—where is the "constant" quantity? Surely not in the sick, and cannot be. And if we cannot render the materia medica a "constant," farewell to all thought of scientific therapeutics. Empirics we are, and empirics we must remain.

But such a materia medica theoretically and hopefully, at least, is that inaugurated by Hahnemann. Once render it accurate and complete (as it surely lies within the range of human power to do), and, while the nature of drugs and the organism of the body remain invariable, it can never change. This alone can afford an unshakable footing for medical art. Without it all is wavering, uncertain, empiric, unconstant.

Up to the production of Ringer's work a few years since, the old school materia medica had grown slowly and with difficulty, and therefore his book was received with loud acclaim until the astounding fact was discovered that the most of what was new and true in it had been derived from homœopathic experiments. Then followed Phillips, who borrowed still more freely from the same source.

But to both of these men the profession owes a debt of gratitude. For pride of opinion and blinding self-confidence had rendered the rank and file of old school medicine insensible to the existence of any territory outside of their own temple. No good out of Nazareth. Cooked upon the homœopathic gridiron, seasoned from its pepper-box, and served in its dishes, they turned with disgust from any food, however wholesome. But fuddled in their own fiving-pan, flavored with their own condiments and served upon an orthodox platter, how good was it! how nourishing and strengthening! The entire regular profession became one incarnate "Oliver, asking for more." Thus were they unconsciously taught Homœopathy, and the men of candor and honor among them brought to recognize truths which otherwise might long have remained unaccepted.

To Ringer and Phillips, then, in my opinion, is largely due the wonderful and almost incredible change which, within the past few years, has come over the spirit of the old school, and once brought to the light of novel truth, even by stratagem, they will never disavow it.

This is the second great truth which all must admit has been developed and established by the homœopathic school of medicine. A principle, the discovery and application of which is the crowning glory of Hahnemann and his followers, which is second to no other in medical art, and which will outlast all the mutations of time.

The third named dogma of Homœopathy is that by the processes of titration and succussion, medicinal properties or powers are developed in drugs.

If this proposition refers only to metallic or mineral substances which, in their crude state, are incapable of absorption into the blood, it is accepted by nearly every one of every school. Certainly there can be no doubt that such substances can be thus rendered more or less useful remedies.

But when the idea is extended so as to cover the so-called theory of "potentization" as developed by Hahnemann and some of his followers, its correctness is denied by many of his own school and by everybody outside of it. Certainly the proposition cannot be said by anyone to have been proven, and I think it is plainly incapable of demonstration.

The gradual development of this idea in the mind of Hahnemann was a very natural thing, especially so when we consider who he was and the science of the day in which he lived. The crude doses he at first administered in accordance with this new-found method were too powerful. They aggravated the symptoms for which they were given. He reduced them and his patients recovered without such aggravations. He diluted

again and again, and still they recovered. And so grew up the idea of "potentization." Once accept the notion that these recoveries were cures, as he did, and some theory had to be invented to explain the supposed facts. Accept the belief that they were recoveries and not cures, and the necessity for any explanation vanished.

When, with our present knowledge, we reflect upon the multitudes that must have been killed by the therapeutic practices then in vogue, and recall the fact that Hahnemann had only such fatality with which to compare his own much brighter results; when we, even at this day, prate so glibly of cure, and so largely ignore the occurrence of recovery, no one can be surprised that he fell into similar error. Experiment has revealed to us a clearer view of the *vis medicatrix nature*, as well as the important influence of other aids in the healing of the sick, and therefore this theory of "potentization" now needs much stronger and more convincing evidence of its correctness.

To me it has always appeared inconsistent to hold that a drug has sufficient power to produce in the healthy organism a certain train of symptoms, and yet, needs "potentization" to enable it to cure a disease presenting similar symptoms.

Nevertheless, I am convinced that some drugs even largely diluted, do sometimes exhibit curative power. Nor do I see any difficulty in admitting this. Surely we have numerous analogies among well known idiosyncrasies. For example, the ingestion of a strawberry is instantly and uniformly followed by an eruption of urticaria. Faintness is produced by the smell of apples. Even the presence of a cat in the room, though unseen and unnoticed, causes asthma, and so on. Such occurrences are not infrequent, and are well authenticated. Why, then, should it be difficult to believe that disease may render at least some organisms susceptible to the curative influence of excessively attenuated drugs?

Such facts, however, afford no argument in favor of the "potentization" theory. They simply illustrate how it may be possible to obtain curative results from exceedingly minute quantities of drugs in isolated and exceptional instances.

But this "potentization" notion involves too many absurdities for a proposition with a truthful basis. For example, when we begin to "potentize," where shall we stop? If the theory holds good up to the "thirtieth," it must be correct *ad infinitum*. Is not this absurd?

Again, if the process of succussion develops power indefinitely, how shall we escape what Hahnemann feared—the development of too great force? Admitting the premises, such a result would certainly be logical, but experiment proves it chimerical and reason calls it also absurd.

When the *cui bono* is demanded from "high potency" believers they uniformly claim that, by the aid of infinitesimal doses they are able to cure disease which would not yield to cruder drugs. Thus they hide in the dark corner where recovery is confounded with cure, and where demonstration, either positive or negative, is impossible. But upon them must rest the *onus probandi*, for they state what they claim to be facts, erect a theory upon them, and call upon the world to accept both.

In view of the absurdities which such a belief involves, the immense majority of physicians of every shade of belief is unable to yield credence to their statements or their theory. We must insist that, in common with many others, they mistake recovery for cure.

Recovery—cure—what do these words signify? In common parlance they are employed as nearly or quite synonymous. Strictly regarded, however, they convey essentially different ideas.

*Cure* is a restoration to health effected by drug influence, either with or without other aids, but which could not have been accomplished without the help of medicine.

*Recovery* is a restoration to health achieved without the aid of drugs.

If these definitions are accurate, it is evident that, while theoretically the distinctive difference between recovery and cure is clear, the differential diagnosis in individual cases may still be extremely difficult. And that it is so I need not affirm.

The consequences of this difficulty have been, still are, and unhappily, will always be, far-reaching and most pernicious. The entire history of medicine is a record of the devious paths through which this will-o'-the-wisp of cure has led the physician into bogs and quicksands. Not a quack ever dishonoured but boasted his cures. Not a therapeutic theory has been broached but has fortified itself by abundant claims of this sort. Most of the drugs admitted into the old materia medica have had no other footing there. And only long years of trial suffice to at last reveal the groundlessness of such claims. In the end, surely, the sound judgment of the profession discerns the true and detects the false, accepts the one and rejects the other. But, in the meantime, what doubt, what difficulty, what damage!

But can we practically distinguish recovery from cure in individual cases? I reply, such distinction can be approximated. But to fairly judge such a question, we must ourselves be judicial. We must be ready to recognize that recovery is not only possible but probable--that it may even be the rule, and cure the exception.

Such an intellectual attitude can scarcely be said to characterize the average, and particularly the younger physician. It is only after experience has begun to silver his hair, as a rule, that the doctor begins to distrust his medicines and transfers the major part of his worship from them to the divine *vis medicatrix nature*. His doses which, at first, appeared to work such marvellous cures, have too often proved but a rotten reed instead of a sturdy staff in perilous paths. And thus, where he fondly thought he could confidently confide in them. His patients get well or may die in most unexpected and provoking fashions. And, as time wears on, you hear him (as he becomes a wise man) speaking less confidently of cure and more hopefully of recovery.

Thus far as regards the physician--now as to the patient.

Certainly may be at once set down as impossible. Probability more or less strong is all that can be attained by man.

But, we may be sure that the more chronic the malady, the less it lies within the boundaries of pure nervous derangement, and the more speedy and decisive the change from disease to health, the more probable is cure. While the more acute the disease, the more purely functional, the more hysterical in character, the more probable is recovery.\*

So also, the more accurate our knowledge of the normal course and termination of acute disease, the more surely can we attribute a sudden, decisive and unusual improvement to the influence of a drug recently administered. And yet on the other hand, one can hardly name an instance of cure in acute disease so quick, so startling and so apparently convincing, as its parallel cannot be found in the annals of recovery.

If we had the recorded results of a purely expectant treatment of sufficient extent and reliability to serve as a basis for comparison, the dilemma would be less perplexing. But even then, so variable in severity and character is disease, so diverse its causes, so inscrutable the influences which environ the sick; that judgment would still remain difficult.

\* Out of the one hundred and ten instances of "model cure" given by Hering in his "Analytical Therapeutics," all but three are cases of hysteria, hypochondria and kindred maladies.

When, therefore, a theory like this of "potentization," which upon its face is improbable, which finds no analogies in science or nature, which involves numerous absurdities, which was invented in credulous times to explain supposed cures—when such a theory appeals for credence to reasonable and properly sceptical physicians with absolutely no proof but assumed cures, it cannot be matter for wonder that few believe it. The real wonder is that it is still believed by any.

No similar objections lie against the other doctrines of Hahnemann which I have named. It cannot be said that the method of treatment by the *similimum*, the principle of the proving of drugs, the comminution of them by trituration, and the dilution of them to avoid aggravation involve what is improbable or absurd, or that they find no analogies in science or nature. On the contrary, these theories and practices are eminently rational, demonstrable, and in accord with science and nature—quite as much so as any in medical art.

The convenience and accuracy of the homœopathic methods of trituration and notation have already led to their extensive employment by many not of that school. The same will be true of dilution whenever it becomes evident that doses of less than a minimum are necessary or desirable. But the doctrine that by dilution and succussion the power of a drug is developed, increased, spiritualized, dynamized or made potent to cure disease, cannot be ranked among the "fillest" which are likely to "survive." In fact, so far as I am able to judge from a somewhat extensive acquaintance in the homœopathic school, and from a perusal of its literature, the number of those who accept this theory, and practice in accord with it, is steadily diminishing. Of homœopathic practitioners in general, I am quite sure it is true that they dilute drugs in order to diminish their medicinal power—not to increase it.

It is well to remember that, while this is a theory developed in and peculiar to the homœopathic school, it has no real or necessary place in its dogmas. Without it Homœopathy stands just as strongly nay, even more firmly and symmetrically.

I conclude, then, that the doctrines of Homœopathy which are fundamental and basic, viz., the proving of drugs, the employment of them according to the method of Hahnemann, and the customary manner of preparing these drugs as remedies, are all improvements in medical art which are so valuable that the world will not let them die. They are founded in truth, and that truth is destined sooner or later to universal recognition.

The single fact that they have existed and have gained ever more extensive acceptance for three-quarters of a century is the best of proof that they have truth in them. We must either admit that men are incapable of discovering what is true and valuable in medical art, or those forms of it which have constantly grown in approval, both in and out of the profession, for long periods of time, are by so much proven to be worthy of credence. As optimists, we must believe that, in medicine, as in theology and in law, the calm, keen judgment of mankind is ever discerning the false and accepting the true, and thus ever more nearly approaching ultimate and absolute perfection. Indeed, no other proof of verity in medical art deserves much consideration. No other, aside from that of superiority in practical application, is possible. And, as has been shown, this is largely and necessarily unobtainable. Therefore, I repeat, that sturdy and continuous growth is the best evidence of the truth of these principles and practices. Hampered as they have been by barnacles and excrescences of many kinds, hindered by the vagaries of unwise friends; championed at times by men whose very defence was an injury; assailed with unparalleled ferocity by the prevailing medical sentiment;

subjected to every test afforded by the science of the age, including the crucial test of time, they have survived alike the ignorance and fanaticism of friends, and the arguments and abuse of enemies; have won their way little by little, until now they stand on the verge of general acceptance.

This cannot be said of any other attempted innovation in medical art. Hydropathy, eclecticism, mesmerism - and endless and numberless - have all exerted a more or less slight influence upon the current of medical theory and practice, have had their little day, and settled down to the position which each deserves, or sunk out of sight altogether. Homœopathy alone has steadily and persistently grown. It has greatly limited the abuse of the lancet, and largely reduced the death-dealing doses of former days, thus contributing not a little to the comfort and prolongation of life. Its history is a record rich with direct and indirect benefit to the human race. It deserves the name of the great medical reform of the century and the age.

May we live to see the day when the *materia medica pura* shall have reached its full development, when physiology, etiology and pathology shall have so cleaned up what is now obscure that we can rightly interpret disease, understand its causes and its course, and so apply the homœopathic method of cure as to reap its full benefits for mankind.

"Never the cause that is right shall be buried in ashes,

Never be lost in the cloud or be sunk in the dust.

Still from the embers the light of the truth ever flashes,

Still there is glory ahead for the cause that is just."

—*The New York Medical Times*, December, 1884

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CROTALUS AS A REMEDY.

*(Continued from p 304, No. 8)*

Crotalus produces in the male, "unusual excitement of the sexual desire;"—in one, "only by day, with complete relaxation of the organs, indeed, apparent impotence"; in another, "at different periods, with erections at night." This is all the action of Crotalus on the male sexual organs yet known. This resembles the action of Cobra on the same organs, as under the latter there is "sexual desire morbidly strong, yet no physical power," "constant violent sexual desire, but with little physical power." In one prover there was "unsual excitement of both genital instinct *and* power," which continued for two months and a half. In Cobra, with unusual excitement of the sexual desire and scarcely any power, there were involuntary emissions at night, followed by great prostration and distress. Under Crotalus in one prover there was "twice a sensation of cutting in glans penis." Under Cobra one prover "felt a stinging, aching, somewhat burning pain along right side of penis, as if immediately under the skin;" another felt a "peculiar distress about the generative organs, attended with great depression of mind." Under Lachesis, one prover (Hering, from 30th dil.) experienced for several weeks, "want of sexual desire and inability for coition, or very late

emission of semen ; erections too feeble ;" another (Stapf, also from 30th), frequent *transient* amorous thoughts, without the slightest physical excitement" The language of another prover is scarcely intelligible ; in him there was great sexual desire, sometimes with, sometimes without, amorousness. We fail to understand the distinction between sexual desire and amorousness. On referring to Jahr's *Symptomen-Codex*, we find the ~~same~~ symptom worded, "increased sexual *instinct*, with or without sexual desire." Here again a distinction is made between sexual instinct and sexual desire, which we fail to comprehend. The unintelligibility of the distinction will be evident when we see that what is sexual desire in the first expression (*Allen*) is sexual instinct in the second (*Jahr*), so that virtually and in point of fact, sexual desire, sexual instinct, and amorousness are one and the same thing. *Hering* experienced violent erections in the morning while half asleep, in the forenoon, during the day, after the siesta, in the evening, and at night, but he does not tell us whether these were accompanied by sexual desire. Under *Lachesis* is recorded the peculiar symptom, "great inclination for mental labor when the increased sexual desire is controlled." The drug gives rise to frequent emissions at night, sometimes unconsciously and without dreams, sometimes with extraordinary voluptuousness, followed sometimes by a comfortable feeling, sometimes by decided weakness and headache, sometimes with profuse sweat. There is emission even during the midday nap. The semen has a pungent, penetrating odour. Under *Lachesis* there are jerkings in the penis, red spots on the glans, the margin of which is congested. The glands of the prepuce and of the glans secrete profusely under its influence ; the testes become hard with a relaxed scrotum ; and there is a pressive sensation from above upon the testes as if a hernia would protrude.

Thus all the three serpent venoms under consideration produce as their primary action unusual excitement of the sexual desire. This is accompanied, in all the three, with relaxation of the genital organs, that is, with but little physical power. Hence all of them are likely to be remedial in impotency brought on after excess. The differentiation between them is furnished by the fact that under *Crotalus* the excitement of the sexual desire is only or chiefly by day ; under *Cobra* there is peculiar

distress about the genital organs, attended with great depression of mind, and involuntary nocturnal emissions followed by great prostration; under Lachesis if the excitement of the sexual desire is subdued the patient feels a great inclination for mental labor, and there are frequent nocturnal emissions followed by weakness, headache and perspiration, or sometimes by a comfortable feeling, the reverse of the preceding symptoms. It is to be noted that the mental depression is greatest from Cobra. The characteristic odour of the semen may be taken as a guiding symptom of Lachesis. Impotence with hard testes in a relaxed scrotum also points to Lachesis.

The action of *Crotalus* on the female sexual organs is expressed by the following symptoms. "Catamenia a week too soon, free, preceded by weight in the head and ears, accompanied by pains in abdomen and back, and cold feet. The period lasts, some hours longer than usual, and is followed by intense frontal headache, which lasts from ten to one o'clock in the night; and this night she had cramp in calf of one leg." In another individual (not from proving but five days after bite on foot) there was abortion in the fifth month of pregnancy, the child being dead. Cobra has not been sufficiently proved to elicit symptoms on the female sexual organs. One prover, who took the 3rd dil. for seven days, had a return of her leucorrhœa for a few hours, thin and whitish. In a patient who had the drug given to her for heart-disease there was violent crampy pain in the region of the left ovary. Lachesis, like Cobra, caused the menses in one prover to appear a week too soon; it is not stated whether the flow was scanty or profuse, but clinically the drug is found useful in too scanty menstruation, after failure of *Sepia*. One prover experienced, under the influence of Lachesis 30th, the return of the following symptoms which she once had several years before: "Tickling itching extending from the thighs into the genitals, which become swollen, with a voluptuous sensation, sexual desire and tickling; then a cramp-like contraction in the uterus, extending into the right side of the abdomen, thence into the breast (in a circular direction), with heat and apprehensiveness; together with these sensations, there is a tickling in the anus, which extends into the region of the kidneys, and thence up to between the shoulders, as if between the skin and flesh."

Dr. Hayward gives from his own practice the following case of Dysmenorrhœa cured by *Crotalus*: "Miss D—, aged 28, pale, weak, strumous looking. Oct. 4th, 1882.—For the last two months very easily tired; tendency to diarrhœa; awakes in the morning with headache over eyes. For five days before menstruation has much pain in hypogastrium and down thighs, fasting during two first days of the flow; flow is very copious the three first days and then lingers on and off for four days more. Much dull, continuous, aching pain in region of heart, down left arm and through to left shoulder-blade, worse on drawing deep breath and going upstairs or a hill; bry. 3, four times a day. Oct. 21st.—Much the same; menstruation occurred with same symptoms; *Crt.* four times a day. Nov. 24th.—Menstruation came on at proper time; was fairly natural and comfortable; much less of the tired feeling, no headache, and scarcely any pain in chest, or tendency to diarrhœa. Cont. *Crt.* 6, night and morning. The next menstruation at proper times and without any disagreeable symptoms." Cobra, according to Dr. Ludlam, has proved useful in ovarian neuralgia, and is Dr. Hughes's "favorite medicine for obscure ovarian pain, not frankly inflammatory."

## AN INTERESTING CONVERSATION.

WE have been favored with the following report of an interesting conversation that took place between a patient suffering from disease in his left eye and an ophthalmic surgeon to whom he had gone for the necessary certificate for an extension of his leave. The conversation in itself is interesting and edifying, but read in the light of the history of the patient it will be found to be more so. We therefore give that history as follows:

Patient is a Munsif in an out-lying district in Bengal. In February 1884 he had rheumatism from which he suffered for some months. At the end of the rainy season he was gradually recovering from its effects. But he had to work hard at Court till late hours in the evening, and had in consequence to expose himself to much cold throughout the whole of December, and the beginning of January 1885. This brought on a pain in the bone under the left eyebrow. Continuing to work in spite of this, aggravated the pain, and the eye-ball was affected. The patient was compelled to take leave, and placed himself under the treatment of the Civil Surgeon of the place. The conjunctiva was red and there was photophobia. Weak solution of lunar caustic was applied to the eye, without benefit. Then liq. lyttæ was applied to the left temple, and lead and opium lotion to the conjunctiva. The symptoms did not abate. Chemosis came on, for which the conjunctiva was scarified. Fever declared itself, and used to come on in the afternoon; there was also considerable shooting pain through the left temple. The pain used to be unbearable in the forenoon and evening. Great heaviness was felt in the eyeball. Cantharides blister was again applied over the temple, and stronger solutions of lunar caustic were dropped into the eye, as also solution of atropine. Purgatives and iodide of potassium mixtures were administered at the same time. The strength of caustic lotion was increased to 4 grs. to the ounce. The application of caustic lotion used to be followed by the application of solution of common salt in water, and then of a few drops of castor oil. Mercurial preparations were also administered to bring on salivation. Finally the strength of the caustic lotion was reduced to 3 grs. to the ounce, and shortly after it was stopped altogether. But the atropine lotion was continued, and blister again applied. All this went

on to the middle of February, when the patient finding no relief took leave, and arrived at Calcutta on the 12th inst., and placed himself under the treatment of Babu N. M. H. who at once detected adhesions of the iris with the Lens. After two days' treatment, Dr. S—n—s was called in consultation; he generally approved of the treatment that was being followed, and made some suggestions, of which one was the application of boracic acid lotion to the eye. Babu H. went on for a fortnight, in the course of which he prescribed iodide of potassium mixture, quinine, salines, liq. arsenic internally, and atropine and boracic acid drops to the eye, ext. of bellad. to the forehead, and steam-bath to the eyeball externally. Under this treatment the intolerance of light diminished to a great extent, and the supra-orbital pain disappeared for three days under salines, but it came on subsequently with its former intensity. A leech was applied to the inner angle of the eye with a view to relieve pain and tension. Not only did this fail to produce the desired effect, but it increased the pain for the whole of that day. Lunar caustic was rubbed over the left temple, but the relief was only temporary. Esserine drops were also applied to the eye. Finding no improvement Babu H. discontinued all medicine for two or three days, and watched the result. On the 3rd or 4th day he said that he would do the needful on the following day. But he did not come. This was about the end of Feb. up to which time he used to come every morning. The patient waited for him for a fortnight, at the end of which the doctor simply sent in his bill for the fee that was due to him. It was now that the patient placed himself under homœopathic treatment. After three days' use of homœopathic medicine the fever disappeared and the pain, and redness diminished to a great extent. In ten days more the pain almost disappeared, only showing itself occasionally in the forenoons and evenings. There was no improvement in the sight, and this led him to place himself under Dr. S—in about the middle of March.

Under Dr. S—'s treatment there was some slight improvement of the inflammation, but none in vision which last, in fact, was not expected, as the adhesions of the iris with the lens were very firm and strong, and there was deposit of lymph on the anterior surface of the lens forming pseudo-cataract. The patient

was distinctly told, when he placed himself under Dr. S—'s treatment, that he could not expect to have the sight of his affected eye restored, but that something might be done to prevent the panophthalmitis getting worse, and to arrest the further progress of the staphylomæ of the choroid which had already taken place. In this way the patient was going on when his leave was about to expire. To have it extended he must have a certificate from a Presidency Surgeon, and he naturally thought of seeing the ophthalmic surgeon who had seen him before. The following conversation took place at the interview between patient and doctor.

*Doctor.* (On seeing the patient)—What is it?

*Patient.* I hope you remember my case, and of having attended on me before.

*Doctor.* (In a low tone)—Oh! yes, these rheumatic cases are very troublesome. Let me see your eye. (After examination with the naked eye)—I must examine with the ophthalmoscope. (While the lamp was being lighted)—What have you been doing all this time? I saw you a long time ago.

*Patient.* You prescribed boracic acid. After using it for a few days I found myself a little better, but the eye got worse again.

*Doctor.* (Impatiently)—Well, well, but that's a long time past. What did you do since?

*Patient.* I put myself under homœopathic treatment.

*Doctor.* Oh! I see. By whom have you been treated?

*Patient.* By Dr. S——

*Doctor.* Dr. M——L——S——?

*Patient.* Yes.

*Doctor.* What has he been giving you? Some minute drops?

*Patient.* That's the usual form of their medicine.

*Doctor.* Of course he promised he would cure you.

*Patient.* No, Sir! He said, the question of sight was very doubtful; he would try to do what he could; time only would show how it will end.

*Doctor.* Who advised you to take this step?

*Patient.* My relatives.

*Doctor.* (About this time the ophthalmoscopic examination had begun)—Well, tell them with my compliments that they

are fools. It has been a practical joke with the eye. (After the examination was over)—Your sight is hopelessly gone. Were I in your position I would bring an action against Dr. S—in the High Court for damages amounting to Rs. 20,000. He has made himself liable to that. You can tell him this. Were I you, I would run him through. I can't even pity you, for you made no proper effort to get yourself cured. I could *then* cure you in six weeks. You understand all this? Do you feel pain in the eye?

*Patient.* Yes, occasionally, but not so much as before. Do you think, Sir, there is no hope left? I shall feel obliged if you can now do something for me.

*Doctor.* I can't do anything for you now. The only course left is to have the affected eye taken out in order to save the other eye, and to watch whether the other eye gets affected or not. I should n't at all be surprised if the other eye is gone too in a short time.

Nothing is so amusing as to see how the old school medicine men lose their temper and reason at the very name of homœopathy. Before the patient had given out that having been in a manner given up by his orthodox medical attendant he was compelled to have recourse to homœopathic treatment, this worthy son of Æsculapius murmured to himself "these rheumatic cases are very troublesome." But the moment he heard of homœopathy, he had no hesitation to ejaculate "I could *then* cure you in six weeks." Why did he not say so *then*? For if he had, the patient would never have thought of change of treatment. If he was so sure *then* that he could *cure* in six weeks a case of Rheumatic Iritis in which adhesions of the Iris with the lens had become firm, pseudo-cataract had formed, there were already staphylomæ of the choroid all round, and vision altogether gone, was he not morally guilty in having kept the patient ignorant of his marvellous skill? But we know he is not so ignorant as he makes himself. At the time he first saw the patient he knew what was what, he knew that no promise could be given, and very wisely he did not give one. And had it not been for the accident of the patient's having had recourse to homœopathic treatment he would never have made a fool of himself as he did.

**REVIEW.**

*The Knowledge of the Physician.* A Course of Lectures delivered at the Boston University School of Medicine, May 1884. By Richard Hughes, M. D. Otis Clapp and Son. Boston, 1884.

(Continued from p. 313, No. 8.)

The physician has a double function to perform, to avert disease,—to maintain life in its normal condition and prevent it from falling into abnormal conditions; and to correct abnormal conditions when they have already taken place, and restore the lost equilibrium. For this purpose a knowledge of life in its normal and its various abnormal conditions is essentially necessary. Having in the first two lectures treated of life and health, Dr. Hughes addresses himself to treat of disease and of the means of its cure, in the next two lectures.

It must be evident that a knowledge of health will help us to a knowledge of disease. Disease is deviation from health, from life in its normal condition; and every man may be supposed to be able to recognise disease from its beginning. But as a matter of fact disease is not always recognised by the individual who suffers from it, till long after its actual invasion. It is a matter of daily clinical observation that disease is sometimes not recognized by the patient himself till he is apprized of its existence by others, and conversely, notwithstanding the most piteous complaints of the patient, disease escapes the notice of the most observant physician, unless he believes in the assertions of the patient. This shows that though, as a general rule, disease may be easily detected by both patient and physician, there are diseases which require to be more scrutinizingly observed to be detected.

To the patient his abnormal sensations must constitute disease. ~~In health~~ the functions of the body are carried on so smoothly that the individual's attention is never attracted to the organs by which they are carried on. When we see, or hear, or smell, or taste, or feel with the skin, or work with the hands, or walk with the legs, or eat, or digest, or think, the apparatus by which we do so, should never obtrude themselves upon our notice, should never remind us of their very existence, if we are in perfect health. There is a limit for each organ beyond which it cannot

work so smoothly, beyond which we have the cry of overwork from it in the form of fatigue, which is the index and warning that the limit of health has been passed. Similarly, whenever the limit of health is passed from any cause, whenever there is a deviation from the normal performance of function, we have it indicated by an abnormal sensation.

How is it then that a patient is sometimes not aware of his disease, till sometime after its invasion? It is because all patients are not equally acute in noticing their abnormal sensations. Nature is never thrifty of her timely warnings, but the patient from a variety of causes does not heed them. If made aware of them by neighbour or physician, he would very often remember that he had those sensations, only he did not think much of them. Functional abnormalities can only depend upon structural changes, and therefore the distinction between functional, and structural or organic, disease is not correct. All that we can say is that in the so-called functional diseases the alterations of structure are not abiding, but are rapidly followed by a return to the normal condition, and therefore cannot be easily, or at all, detected. For a knowledge of such diseases we are chiefly dependent upon the sensations of the patient. But for other diseases in which the alterations of structure are persistent not transient, our knowledge of them may be independent of the patient's sensations. But even in these diseases the alterations of structure, in the very beginning, are so very slight as to be unappreciable by the coarse instruments at present available for their detection. Hence in the incipient stages of these diseases, when diagnosis is of the utmost importance, our chief reliance is upon the patient's sensations. The patient's sensations, therefore, are in every case of as much value as the recognizable alterations of structure. To connect alterations of structure with alterations of function, and the abnormal sensations they give rise to, is one of the prime functions of the physician. The abnormal sensations, it must not be forgotten, are as much alterations of functions, as alterations of functions ordinarily recognized as such. These abnormal sensations are alterations of functions of the various parts of the nervous system, and therefore to class them as other than alterations of function would be physiologically incorrect.

Alteration of function must follow, and can never precede, alteration of structure. This alteration of structure may vary from the

slightest molecular disturbance to chemical change and actual dissolution. In the majority of cases molecular disturbance is the starting point of disease. In other cases chemical and physical changes may, from direct action of chemical and physical agents, be the very beginning of disease. In all cases the primary disturbance, whether molecular, chemical or physical, is followed by a series or succession of disturbances in parts related by contiguity or continuity of structure, or through the blood and other fluid, or through the nervous system, ganghonic or cerebro-spinal. The evolution of this series or succession of disturbances takes place after definite laws dependent upon the original disturbance and the constitutional peculiarities of the patient. In this series we have structural changes associated with changes in function. The whole series, from the first disturbance or change to the last, constitutes disease. Considering the very great complexity and fineness of the human organism, and the very imperfect knowledge we have of that organism, it must be evident that all the changes or phenomena constituting the series are not likely to be recognized by observation or reasoning or both. In point of fact many escape notice altogether, while some are so obvious as to be easily observed.

The alterations of structure, being chiefly internal, are those which escape notice; while the alterations of function, which follow and remain associated with structural alterations, being chiefly external, are those which attract notice. Hence disease has come to be looked upon as some change or changes in the interior of the organism, and the changed functions as its symptoms—phenomena which fall together or coincide with the change or changes in the interior. The coincidence being regular, according to definite laws, ought to point, and, if correctly interpreted, must point to the morbid changes in the interior of the organism. But as already repeatedly said, the internal morbid changes are not easily, and sometimes not at all, recognized. Though not recognizable in themselves, yet knowing their associated symptoms, and knowing too that the co-existence and succession of symptoms vary in different cases, each variation having laws of its own, we can, from the symptoms alone, form definite groups of disease which, when the time comes, may be correctly referred to their proper morbid alterations.

What was Hahnemann's idea of disease and symptom? We have the following in the 4th Ed. of the *Organon*: "The invisible morbid alteration in the interior, and the outward change of condition noticeable by our senses (the totality of the symptoms), together constitute, to the gaze of the Almighty Creator, that which we call disease. But the sum of the symptoms is the only side of the malady accessible to the physician—the only one observable by him, and the principal thing which he can learn from the patient and employ for his benefit." The same idea is repeated in the 5th Ed. (§ xv), though in a somewhat different language, thus: "The affection of the morbidly deranged spiritual dynamis (vital force) that animates our body, in the invisible interior, and the sum total of the outwardly cognizable symptoms produced by it in the organism and representing the existing malady, constitute a whole; they are one and the same. The organism is indeed the material machine to the life, but it is not conceivable without the animation imparted to it by the instinctively perceiving and regulating vital force (just as the vital force is not conceivable without the organism), consequently the two together constitute a unity, although in thought our mind separates this unity into two distinct ideas, for the sake of facilitating the apprehension of it."

Hahnemann was thus a vitalist, but the confession bursts forth in the last statement we have quoted that the vital force is inconceivable without the organism, and *vice versâ*. We see plainly from these and other statements what he meant by symptoms, and what side of disease he believed to be inaccessible to human observation. This was the spiritual side of it, the morbid affection or derangement of the vital force. "When a person falls ill," says he (§ xi), "it is only this spiritual, self-acting (automatic) vital force everywhere present in his organism, that is primarily deranged by the dynamic influence upon it of a morbid agent inimical to life; it is only the vital force, deranged to such an abnormal state, that can furnish the organism with its disagreeable sensations, and incline it to the irregular functions, which we call disease; for, as a power invisible in itself, and only cognizable by its actions in the organism, its morbid derangement only makes itself known, by the expression of disease in the sensations and functions of those parts of the organism exposed to the senses of

the observer and physician, that is, by *morbid symptoms*, and in no other way can it make itself known." These morbid symptoms include "the changes in the health of the body and of the mind, which can be perceived *externally* by means of the senses, that is to say, the deviations from the former healthy state of the now diseased individual, which are felt by the patient himself, remarked by those around him, and observed by the physician. All these perceptible signs represent the disease in its whole extent, that is, together they form the true and only conceivable portrait of the disease." (§vi.)

Elsewhere (§ xix) Hahnemann has said "*diseases* are nothing more than *alterations in the health of the healthy individual*, which express themselves by morbid *SIGNS*." In some places he speaks of symptoms *and* signs. Thus (§ xiv) "there is, in the interior of man, nothing morbid that is curable, and no invisible morbid alteration that is curable, which does not make itself known to the accurately observing physician by means of morbid signs and symptoms." Notwithstanding this we do not find Hahnemann making any distinction between sign and symptom, as is sometimes, though not with much consistency, done in the present day. "Recently," says Dr. Quain (*Dictionary of Medicine*), "an attempt has been made to give a more special meaning to these terms. Symptom, more especially if it be characterized by the prefix *vital*, is intended to refer to modifications of function or to such *subjective* phenomena as we can learn from the patient's accounts of his feelings. On the other hand, the term *sign*, more markedly with the prefix *physical*, indicates those morbid changes which are objective or may be recognised by the senses of the physician, assisted by other appliances." But this distinction, as can be easily shown, can never be maintained. It is therefore better to use them indifferently, as Hahnemann did, to signify morbid phenomena.

~~A~~ careful perusal of the *Organon* will show that though Hahnemann gave what may be looked upon as a very wide definition of symptom in § vi. as quoted above, he never meant by it more than disagreeable sensations and altered functions: he never associated these with alterations or changes in structure. He is very clear on this point. In the foot note to §xxxi. he says, "when I call disease a *derangement* of man's state of health I am far

from wishing thereby to give a hyperphysical explanation of the internal nature of diseases generally, or of any case of disease in particular. It is only intended by this expression to intimate, what it can be proved diseases are *not* and *cannot be*, that THEY ARE NOT MECHANICAL OR CHEMICAL ALTERATIONS OF THE MATERIAL SUBSTANCE OF THE BODY, and not dependent on A MATERIAL MORBIFIC PRINCIPLE but that they are merely spiritual dynamic derangements of the life." He was not, as he could not be, unaware of structural changes, but these he was inclined to look upon not so much as the result of natural diseases, as of the prolonged, violent old school treatment, "wherewith the vital force is sometimes weakened to an unmerciful extent, sometimes, if it do not succumb, gradually abnormally deranged (by each substance in a peculiar manner) in such a way, that, in order to preserve life in action from these inimical and destructive attacks, it must produce a revolution in the organism, and either deprive some part or other of its irritability or sensibility, or exalt these to an excessive degree, cause dilatation or contraction, relaxation or induration, or even total annihilation of certain parts, and develop organic imperfections here and there in the interior or the exterior, (cripple the body internally or externally) in order to preserve the organism from complete destruction, by the ever renewed, hostile assaults of such ruinous potencies." (§ lxxv) He is more emphatic in the foot-note: "If the patient," says he, "at length succumbs, the practitioner of such a treatment is in the habit of pointing out to the sorrowing relatives, at the *post mortem* examination, these internal organic changes, which have to thank his pseudo-art for their origin, but which he artfully maintains to be the original incurable disease. Those deceitful records, the illustrated works on pathological anatomy, exhibit the products of such lamentable bungling."

So far as he could do so in words Hahnemann was emphatic in his denunciation of pathology, and absolute in his rejection of it for therapeutic purposes. And he was right so far as the pathology of his time was concerned, and so far as all pathology dealing with speculation as to the essential nature of disease is concerned. Pathology as a science of disease did not exist in Hahnemann's time, and cannot be said to have come into existence even in the present day. But the materials for its foundation and superstruc-

ture are being gathered. And though the ultimate nature of disease is far from being disclosed, the alterations of structure in disease elucidating the alterations of functions, are being revealed more and more; so that we are getting more and more insight into the hitherto unknown terms of the whole series of disturbances which constitute disease. This is no small addition to our knowledge of disease. And this additional knowledge is no small help in the comprehension of symptoms even in Hahnemann's sense of mere disagreeable sensations and altered functions. Without subscribing to the definitions given of pathology and pathological anatomy by the late Dr. Carroll Dunham, we quote the following passage from his address before the World's Homœopathic Convention as containing a very just view of the utility of Pathology to the homœopathic physician. "Pathology is the science of functions as modified by disease, and pathological anatomy the science of tissues as modified by disease. Using the word symptom in its largest sense, as a modification of function, or tissue, or both, pathology is, therefore, the science of symptoms. It concerns itself with the relations of symptoms to each other as individuals or classes, with the rank of different symptoms in order of time and causation, with their origin and evolution, and their relation to tissues, organs, or apparatus." Then he shows how pathology enables us "to detect the dependence of symptoms upon material removable causes," and thus "leads us to those measures which Hahnemann supposes every 'sensible physician' will resort to before he has recourse to therapeutics proper"; how "it enables us to detect 'morbid chronic miasms' as the hidden causes of chronic disease"; how enabling us to trace the relations of symptoms to each other, it enables us to relegate many cases to the domain of hygiene, which were formerly regarded as proper subjects of drug treatment; and how it "enables us to procure from observation of the patient a much more complete picture of the totality of the symptoms than would be possible without its aid."

- Dr. Dunham illustrates his position by a couple of examples: "Where the routine observer, getting the symptoms resulting from a diseased kidney might, from the absence of striking symptoms, fail to interrogate those of the heart, or *vice versa*, and thus fail to get the complete totality of the symptoms, the

pathologist is led by his knowledge of the close relations of these organs in disease, to investigate more closely, with results which greatly assist his selection of the remedy. Or the routine observer *might* fail to get, in a pleurisy more symptoms than those of a pleurodynia ; but the pathologist, who knows the semblances and differences in the symptomatology of these affections, will so direct his inquiries as to bring out a totality of symptoms which should not only leave no doubt as to diagnosis, but should also point more clearly to the remedy than the others. So it appears that modern pathology, which has been assumed to stand in direct opposition to the doctrine that for the prescriber the totality of the symptoms represents the disease he is to remove, is really the prescriber's most efficient and indispensable instrument and aid in getting at that very totality of symptoms which he is to remove by a corresponding drug. Used in this way, as an aid in the methodical investigation of the symptoms, both of disease and of remedies, pathology, imperfect as it is, is of inestimable value to the homœopathist. And taking this view of the subject, I do not hesitate to say that the strict Hahnemannian, if, with complete medical culture, he investigate and treat his case in the spirit of Hahnemann's doctrine, is the best and profoundest pathologist."

It would be easy to multiply examples, from almost every case of disease, of the utility of pathology in the elucidation and even the discovery of symptoms. A knowledge of the pathology of the cerebro-spinal nervous system, for instance, as worked out in the present day, enables the physician to differentiate between apparently similar abnormal sensations and altered functions, much better than if he were to grope in the dark amongst these sensations and functions alone ; and such knowledge would undoubtedly enable the experimenter to conduct provings of drugs with greater scientific accuracy and precision, than otherwise. On the other hand, a careful and minute attention to symptoms would oftentimes put the physician on the track to the discovery of new lesions and alterations of structure. And thus pathology and symptomatology would exert a most beneficial influence upon each other, and co-operate materially in enabling the therapist to arrive at a more and more correct knowledge of disease.

Such being the case, the question is, taking symptoms in the sense in which Hahnemann understood it, namely, disagreeable sensations and altered functions, is the totality of such symptoms the whole disease even from a therapeutical point of view? In other words, is it sufficient in every case for purposes of therapeutics? We have seen that, as a general rule, each disease has its own series of symptoms associated together, and following each other, after certain definite laws; and therefore if we are careful to note all the symptoms, "which are felt by the patient himself, remarked by those around him, and observed by the physician," then though we may not have the absolutely "true and only conceivable portrait of the disease," we will have a portrait which will be nearer the disease than any other, because it will contain some (the external) lineaments of the disease peculiar to itself, and therefore incapable of being mistaken for those of others. Theoretically this is true, and therefore so far Hahnemann was right. But we have seen the difficulty of detecting symptoms by both patient and physician, when the attention is directed to symptoms in the Hahnemannian sense alone, that is, merely to the external manifestations of disease.

Then again there are diseases which, as Dr. Hughes has beautifully observed, are expressionless, such as caries of the vertebræ and senile pneumonia. We remember, in the early days of our conversion to Homœopathy, to have had a case of leprosy in a young female in whom besides the discoloration of the skin there was no symptom properly speaking, no symptom that the patient would complain of, no symptom that we could detect, referrible to the digestive, the reproductive, or the nervous system. The sensibilities of the skin were not even altered. And yet there was no mistake about the diagnosis, as was abundantly proved by the progress and termination of the disease. In such cases to wait for the development of symptoms would be to lose precious time, and even then symptoms may not be adequately forthcoming for purposes of treatment. And Dr. Hughes himself has very rightly observed, "to attempt to 'cover' these from the results of the provings of drugs would be futile."

How then does Dr. Hughes maintain the position assumed by Hahnemann that the totality of the symptoms is, to the therapist, the disease? He has done so by drawing a distinction

between medicine as a science, and medicine as an art. But can medicine as an art exist unless based upon medicine as a science? "The physician," says Dr. Hughes, "is not primarily a cultivator of science: he is a craftsman, the practiser of an art, and skill rather than knowledge is his qualification." Thus, we say with the greatest reluctance, is quite unlike Dr. Hughes. What is skill? It is the readiness and dexterity to apply knowledge to practical purposes. It, therefore, presupposes knowledge. It cannot exist without knowledge. And what is science? It is but another name for knowledge. It is true, the more knowledge advances, the more will it become methodical and systematic, and thus rise in dignity as science. Nevertheless the earliest beginnings of knowledge are as much science as the most elaborate science of the present day. We laugh at the science of yesterday as but crude knowledge, and the science of to-day is not unlikely to share the same fate to-morrow. Whoever practises medicine, therefore, whether the accomplished physician of the present day versed in all knowledge direct and indirect bearing on his art, or the veriest empiric whose knowledge of disease and drug is the simplest conceivable, practises it on the basis of previous knowledge. And the more advanced that knowledge is the better for him and his patient.

On the other hand we find that the scarcely logical distinction between medicine as a science and medicine as an art has led Dr. Hughes to depreciate the value of symptoms more than they deserve. "If we were dealing with it (disease) as an object of science, a branch of natural history, it is certain that symptomatology would be an insufficient basis for our knowledge." Taken in itself this is true; but taken with the reason assigned, namely, "the basing entities of disease on symptoms gave us such pathological entities as hydrops, icterus, apoplexy, and the like," it shows a misconception. Isolated symptoms do not constitute symptomatology. Symptomatology, properly speaking, is the whole series of symptoms from the starting point to the termination of the disease. Symptomatology is, therefore, the totality of symptoms as expressed by Hahpemann; and as we have seen, a correct interpretation of symptomatology or totality of symptoms as understood by him would lead to natural groups of disease, as natural and scientific as those which would be formed by

a thorough knowledge of altered function and structure. Those who formed hydrops; icterus, apoplexy, &c., into separate diseases did so on the basis of isolated symptoms, in utter disregard of associated symptoms, that is, of symptomatology or the totality of symptoms. Against treatment directed towards isolated symptoms Hahneman protested with all his might. "In all times," said he, "the old school physicians, not knowing how else to give relief, have sought to combat, and if possible to suppress, by medicines, here and there, a *single* symptom from among a number, in diseases—a *one-sided* procedure, which under the name of *symptomatic treatment*, has justly excited universal contempt, because by it, not only was nothing gained, but much harm was effected. A single one of the symptoms present is no more the disease itself than a single foot is the man himself." So that the reason assigned by Dr. Hughes of the insufficiency of symptomatology as a basis of the scientific knowledge of disease is not the proper one. That insufficiency is due to symptomatology (in the limited sense) being but a partial, incomplete representation of disease. And as such it must be insufficient for purposes of therapeutics.

But Hahnemann was scarcely consistent when he said that disagreeable sensations and altered functions alone were symptoms, and that the totality of such symptoms was the disease. It would appear as if he had felt the untenability of his position. If we look at the pathogeneses of drugs as he has given us, and if we study the portraits of diseases as he used to draw them we shall find that he did not as he could not confine himself to disagreeable sensations and altered functions. He had perforce to take note of alteration of structure, such as inflammatory or other swellings, eruptions and ulcerations of the mucous membrane and the skin, of other parts and organs of the body, such as the tongue, the tonsils, the parotids, the bones, &c. It may be observed that all these alterations of structure had reference to the *exterior* of the body, or so far as they could be observed *externally* by the senses. True; but these can never be brought under the category of disagreeable sensations and altered functions. Hahnemann had a horror of the interior, which he often calls the hidden and unknown interior of the body. The extreme difficulty, especially in his time, of detecting the internal morbid changes,

was naturally exaggerated by him into an impossibility. And this undoubtedly saved his system, at the time he promulgated it, from falling into the pitfalls of speculation and uncertainty. But this is no reason why the positive advance of knowledge should be ignored, especially when that knowledge tends to the positive advancement of his system. The law of progress demands that we should admit, in order to avoid, the errors of the past. And in our humble opinion the attempt to defend or explain away the errors of Hahnemann is inconsistent with a regard for truth.

We have discussed the subject at some length even at the risk of some repetition, in order to render our meaning clear, and to show that the totality of symptoms in the Hahnemannian sense cannot be the disease either in reality, or for purposes of therapeutics in all cases. The position can only be made tenable by extending the meaning of the term symptom, as Dr. Dunham has done, to make it signify alteration of structure as well as alteration of function. Dr. Hughes himself, though upholding Hahnemann's position, does not approve of the rejection of pathology by him, still less of that rejection by his strict followers. "His (Hahnemann's) ground for taking symptoms," says he, "as the element of parallélism between disease and drug-action was that they only were surely known. In his day this was true, and his selection of them was most prudent. But to maintain that they only were knowable was unwarrantably to bar the advance of science. His stricter followers have acted on the *dictum*, and have looked askance on the positive pathology of the present day, with its physical diagnosis and *post-mortem* confirmations. They are always a decade or more behind hand in their recognition of such distinctions as those between typhus and typhoid, between chancre and chancroid, and in their use of such means as auscultation and thermometry. Now this is altogether wrong. An inference from symptoms, if sure, is as good a basis for treatment as symptoms themselves. ~~This~~ sureness is assumed in the prognosis given and the general management instituted: why should it not be also for purposes of drug selection? By proceeding upon it we secure another route to the *simile* we desiderate. We use symptoms to reach it, because they are its most certain expression; but, if it can be otherwise attained, the alternative access may often be useful."

## CLINICAL RECORD.

*A Case of Injury necessitating Amputation treated in the*

*Natuda Charitable Dispensary.*

BY BABU BEPIN BEHARY CHATTERJEE, M. B.

Srinibas, a fairly nourished man, aged 38, was brought in the afternoon of the 12th June 1885 to the Dispensary for an injury, caused by a tree suddenly coming upon his right leg while engaged in felling it. On removing the dressings, put on by his friends and relatives, a large lacerated wound, from which blood was oozing, was exposed at the anterior aspect of the leg, commencing from the ankle to a point about 2 inches below the knee; the tibia and fibula, both of which were fractured, protruded through the wound, 3 inches above the ankle, the fibula being broken a little higher; the soft structures were found much pulpified. The accident took place at about 11 A. M. and there was excessive loss of blood.

The patient was very thirsty, pulse almost imperceptible at the wrist, could only answer one or two questions very feebly.

5 P. M. Amputation was performed under chloroform, little below the knee, by lateral flaps, the popliteal artery tied by catgut, hæmorrhage was slight, flaps stitched by horse hair, stump dressed with clean rags soaked in carbolic lotion (1 in 100).

After operation patient was quite cold and collapsed, perspiring freely, pulse not perceptible at all, respiration hurried. Temp. subnormal. Gave him *China* 6 every half an hour, and hot milk at intervals.

13th June, 8 A. M. Had 10 doses of *China*, vomited once, limbs warm, pulse perceptible. Dressings not changed, milk diet continued, and *China* every 3 hours.

6 P. M. Temp. 102.2, pulse 120, small and compressible, thirst much less. Medicine stopped.

14th, 7 A. M. Temp. 101. Dressings changed, flaps looked well. *Aconite* 3 every two hours. Milk and sago.

15th, 7 A. M. Temp. 99. Feels better, and is hungry; dressings changed, flaps united at points. Had 4 doses of *Aconite*.

6 P. M. Temp. 100. Bowels moved once, no medicine.

16th, 7 A. M. No fever, doing well.

17th. Suppuration established, discharge offensive, dressed as before. Milk and rice. No medicine.

18th. Complained of cough, large bronchial rales were heard. *Bryonia* 6, 4 doses. Rice and milk continued.

19th. Much the same. *Bryonia* 6 continued.

20th. Cough not diminished. Temp. 100. Rice stopped; milk and sago only. Medicine stopped.

21st Oct. Temp. 102. Pneumonic symptoms, evening Temp. 103. *Ant. Tart.* 6, 4 doses, every 3 hours. Milk and sago.

22nd. Morning temp. 100. Had 4 doses of the medicine; bronchial sounds only audible. *Ant Tart.* 6, 2 doses.

23rd. Temp. morning and evening normal. No medicine. Diet, milk and sago.

24th. Morning Temp. 98.4. No med. Milk and sago. Evening Temp. 100.

25th. Temp. normal. Evening temp. 103 Lungs found quite healthy.

26th. Morning Temp. 98.4. *Quinine sulph.* grs. 10. Evening Temp. normal.

27th Doing well. *Quinine sulph.* gr. ii.

The patient was discharged on the 11th July, completely cured, with a good stump and without any more medication, all along being dressed with carbolic lotion.

#### Remark.

The case very well illustrates the power of *China* in controlling the depressing effects of excessive hæmorrhage, and also the power of homœopathy in assisting the Surgeon in cases of great emergency.

### Acknowledgment

1. *History of Homœopathy. Its Origin, Its Conflicts* With an Appendix on the Present State of University Medicine. By Wilhelm Ameke, M.D., (of Berlin). Translated by Alfred E. Drysdale, M.B. (of Cannes). Edited by R.E. Dudgeon, M.D. E. Gould and Son London, 1885.
2. *A Cyclopædia of Drug Pathogenesis.* Issued under the auspices of the British Homœopathic Society and the American Institute of Homœopathy. Edited by R. Hughes, M.D., and J.P. Dake, M.D. Part. II. Agaricus—Arnica E. Gould and Son, London, 1885.
3. *The Reign of Law in Medicine* Being the Hahnemannian Oration for the year 1885. (Delivered Oct. 5, 1885) By D. Dyce Brown, M.A., M.D., Lecturer on Practice of Medicine at the London School of Homœopathy. Trübner & Co. London, 1886.
4. *Life of Babu Aksay Kumar Datta* (in Bengali). By Madendra Nath Râya. Calcutta, 1886.

**THERAPEUTICS OF CONSTIPATION, DIARRHŒA,  
DYSENTERY, AND CHOLERA.**

**80. CYCLAMEN.**

**•Constipation •**

- 1. Constipation after diarrhœa.
2. Absence of the usual morning st.
3. Frequent evacuation of hard st.
4. St. seems to shoot out, at first crumbly, then soft, with palpitation of the heart.
5. St. consisting of hard masses
6. St. with great urging and discharge of some blood.

**Diarrhœa :**

1. Thin fluid evacuations from the bowels, with frequent rumbling in the intestines, and passage of flatus.
2. Sts at first normal, afterwards very thin, light yellow.
3. Sts odorless, brownish yellow and mixed with mucus.
4. Pinching in the epigastrium, as if D would ensue, and shortly afterwards a yellow, soft st., with recurring persistent pinching in the abdomen, whereupon constipation ensued.
5. D renewed after every cup of coffee
6. Diarrhœa-like sts., before and after breakfast, preceded by griping pain in the abdomen
7. Sudden thin st. in the evening, without colic.
8. Pasty st.
9. Watery D., preceded by rumbling and colic

**Dysentery :**

1. Immediate urging to st in the morning ; it was thin, with burning and straining, followed by blood
2. Slimy stool, which afterwards is even passed unnoticed.

**Aggravation :**

1. Morning. Evening
2. After coffee.
3. After pork and fat food (Bell).

**Before St :**

1. Griping pain in the abdomen.
2. Pinching in the epigastrium.
3. Urging.
4. Rumbling and colic.

**During St :**

1. Burning and straining
2. Frequent rumbling in the intestines.

**After St :**

1. Streaks of blood.
2. Renewed ineffectual urging to st.

**Rectum and Anus :**

1. In and about the anus and the perinæum drawing aching pain, as if the parts were suppurating, when walking and sitting.

2. Heat in the rectum with swelling of the hæmorrhoidal vessels.
3. Stitches in the rectum and anus.
4. Ineffectual urging to st.

### **General Symptoms :**

1. Obtuseness of the mind ; he is neither inclined for, nor capable of any work.
2. Peevish, morose disposition, he easily takes every trifle in bad part, and gets angry over it. Peevish and cheerful alternately.
3. Profound reflection, concerning the present and future almost to weeping
4. Disinclination for all work, until towards evening, he can not make up his mind to do the least thing.
5. Confusion of the head, which with the other symptoms of the head, was relieved after cold applications to the forehead, so that she began to read : after a while sudden faintness ; all objects seemed to turn in a circle ; it became black before her eyes, followed at last by violent vomiting.
6. Vertigo with pain in the forehead towards evening. A frequent sensation as though objects were turning in a circle ; aggravated on moving in the open air, and relieved in the room and while sitting.
7. Great confusion of the head, in the evening, with vertigo, as if objects were wavering, and feeling of stupidity in the head, so that she was unable to think, and did not comprehend what she was thinking or doing, with heat of the head, redness of cheeks and glistening eyes, alterations of chilliness and heat, full, hard pulse over 160, and finally nausea and watery diarrhœa preceded by rumbling and colic.
8. Eyes are sunken, surrounded by blue rings.
9. Pupils alternately dilated and contracted ; contraction afterwards persisting.
10. Flickering before the eyes, as of various colors, glittering needles, vision as of smoke or fog.
11. The muscæ volitantes, which the prover usually had in an intense light, disappeared during the whole of the proving.
12. Vision more acute ; can distinguish colors at a greater distance. Double vision.
13. Dry lips without thirst
14. Tongue : very white ; yellowish white ; tip red, covered with blisters, with increased saliva.
15. Very frequent accumulation of water in the mouth and imperfect eructation with the taste of food. Waterbrash.
16. In the evening great dryness in the palate with thirst and hunger.
17. The saliva has a salty taste, which is communicated to all the food eaten.

18. Taste : flat ; bitter ; nauseous ; offensive.
19. Complete loss of appetite and thirst especially at breakfast and supper ; as soon as he begins to eat at these times he becomes satiated.
20. If he takes but a small quantity of food, the remainder is repugnant to him and excites loathing, and he feels nausea in the palate and throat.
21. He has dislike to bread and butter and fat ; warm food goes down better. Aversion to beer.
22. Everything except lemonade causes inclination to vomit.
23. Vomiting and diarrhœa after taking coffee.
24. Food has for him a flat, almost no, taste.
25. Adipsia, for four days, then the thirst returned and was sometimes more intense than in his normal condition.
26. Hiccough after meal.
27. After dinner and supper nausea with inclination to vomit, squeamishness and qualms in the gastric region, as from eating too much fat.
28. Vomiting of mucus, followed by uneasy sleep, interrupted by starting up and unpleasant dreams.
29. Vomiting a greenish liquid, followed by headache, vertigo, and dim vision.
30. Immediately after meal rumbling in the hypogastrium.
31. Pinching cutting pain in the hypogastrium.
32. Discomfort in the hypogastrium with some nausea.
33. Frequent copious discharge of whitish urine.
34. Much sediment in the urine, reaction acid, chlorides abundant.
35. Great peevishness and lethargy of the mind, with bodily exhaustion, which latter only goes off as soon as he moves about.
36. He is fatigued in all his limbs, as if their mobility were hindered.
37. In the evening great inclination to sleep ; he cannot resist it.
38. Restless sleep, dreams about money. Sleeps longer than usual, in the morning.

**Remarks :** *Cyclamen* has been very correctly likened to *Pulsatilla* in many of its symptoms. Both have diarrhœa and constipation. The dysenteric symptoms are more prominent in *Puls.* A great characteristic of the *Cyclamen* stools, even when they are those of constipation, is that they are expelled forcibly—they shoot out. The nocturnal aggravation is more marked in *Puls.* than in *Cyclamen*. The color of the stools of *Cyclamen* is predominantly yellow, that of *Puls.* green. The general symptoms of *Cyclamen* have aggravation in the open and cool air, which are the precise conditions of amelioration of the general symptoms of *Puls.* The *Puls.* symptoms are generally aggravated in a close, warm room. The following case

cited by Hoyne shows the class of cases in which *Cyclamen* is useful : " Prince G., aged forty, who had long suffered from gnawing pains in the bowels ; face bloodless, with sunken features ; great debility ; loss of appetite ; lifeless feeling in his bowels ; constant gnawing pain in abdomen ; all food caused great discomfort and swelling of the abdomen, with frequent eructations of flatulence ; stools rare and hard, expelled with great effort ; sometimes had thin, watery and slimy evacuations. *Cycl* 12, four doses cured."

## 81. DIGITALIS.

### Constipation :

1. Faeces scanty, or very hard, difficult though rather copious st.
2. Bowels confined St retained somewhat during all the provings, very unusual, since the sts have always been free and healthy.
3. Constipation, urine abundant or suppressed
4. Constipation, with nausea, vomiting and loathing of food.

### Diarrhœa :

- 1 After constipation, a quite soft, yell.w st. without suffering.
2. Ash-colored diarrhœa, as in jaundice After vomiting, faintness, followed by violent D. of an ash-colored, pappy matter, as in jaundice.
- 3 Thin sts, then constipation in the morning ; and only in the evening, evacuation with many thread worms.
- 4 Sts became quite soft and liquid and also much more frequent and profuse
- 5 Bellyache more tearing than shooting, in the morning in bed, followed by two attacks of D. and thereafter urging to st. in the rectum.
- 6 D. consisting of faeces mixed with mucus, preceded by bellyache, sometimes pressive, sometimes cutting, which went off each time he went to st.
7. Intestinal evacuations were copious, and seemed to contain a good deal of bilious matter
8. Yellowish white st.
9. Scanty, green evacuation.
10. He passes st. and urine involuntarily.
11. Violent diarrhœa D preceded and followed by colic.
12. After a copious, loose st., next day scanty motion consisting of a dozen pellets like those of a rabbit, and one like a walnut
- 13 Offensive, pappy sts., preceded by griping pains with frequent passing of flatus
14. Intestinal pains, bilious sts., the abdominal walls strongly retracted upon the intestines ; tongue swollen, coated yellow ; skin hot, dry ; pulse 150, hard, wiry

### Dysentery :

1. Almost incurable dysenteries.
2. Gentle intestinal evacuations, which were bilious and mucous.

**Before St :**

1. Chilliness.
2. Faintness.
3. Colic.
4. Cutting in the abdomen.

**During St :**

1. Cutting in the abdomen.
2. Passage of thread worms.

**After St :**

1. Urging.
2. Bellyache relieved.
3. Colic.

**Rectum and Anus :**

1. Urging to st.

**General Symptoms :**

1. Dejection of the mind and apprehensiveness. Fear of death.
2. Great anxiety. Fearful apprehensiveness of a sad character with great depression, extremely aggravated by music.
3. Weakness of memory.  
Thinking is difficult, and he forgets everything, immediately, with internal and external heat of the head.
4. Delirium at night.
5. Vertigo, on rising from sitting, on ascending steps.
6. Objects appear of a green or yellow color.
7. Pupils dilated and insensible.
8. Yellowish redness of the conjunctiva palpebrarum. (Hg).
9. Face pale. Expression of extreme prostration.
10. Tongue coated white ; yellow ; tongue swollen.
11. Excoriation of the inside of the mouth, fauces, œsophagus, stomach.
12. Anorexia with clean tongue. Loss of appetite.
13. Saliva at first sweet but afterwards saltish. Copious, foetid saliva.
14. Bad smell from the mouth.
15. Taste flat, slimy ; of sweet almonds, after smoking.
16. With good appetite bread tastes bitter. Appetite for bitter food.
17. Excessive thirst, caused by great dryness of the mouth and pharynx ; this thirst tormented him the whole night ; was not quenched by copious draught of beer and water. Desire for cold drinks and sour drinks.
18. Sour eructations. Eructations of an acrid fluid, followed by acidity in the mouth.
19. Hiccough, which does not rise quite up to the throat. Very frequent hiccough.
20. Nausea, with extreme depression of the mind and anguish.
21. Excessive nausea with inordinate vomiting, coldness of the limbs and cold sweats.
22. Increased nausea with vomiting of the food he had eaten,

- which was enveloped in white tasteless mucus, whereupon the bellyache that was present went off.
23. Vomiting of green bile; first ingesta, then liquid, and finally greenish yellow; of mucus, followed by bile, without food; blood.
  24. Vomiting, with retching, excessive nausea, great anguish in the pit of the stomach, and external heat, mingled with shivering, followed by sweat, with chilliness.
  25. Persistent nausea and vomiting; nausea even after the vomiting. (Hg).
  26. Faintness or sinking at the stomach, as if life was becoming extinct.
  27. After a meal, the food presses in the scrobiculus cordis (pit of stomach), while sitting, not while standing.
  28. Extreme sensitiveness in epigastrium.
  29. Heat, burning and painfulness of stomach.
  30. Gripping in the abd. Harassed with tormina after going to bed, which lasted till 3 A. M. The abd. is painful, as if ulcerated, when moving, but not when touched.
  31. Incessant urging to urinate and passage of only few drops, at a time; urine dark brown, hot, burning while passing.
  32. Retention of urine.
  33. Frequent passing of watery urine.
  34. After diuresis, retention of urine, then nausea, vomiting and diarrhœa. (A very rare alternate action.—Hahnemann.)
  35. Hæmoptysis. Expectoration from the lungs colored, with blood.
  36. Pulsation of abdominal aorta, anxiety, epigastric constriction.
  37. Pulse intermittent, irregular, full and irregular when sitting, quickened, weak and irregular when standing.
  38. General weakness, as if all parts of the body were exhausted.
  39. Cramps. Restlessness.
  40. At night sleep disturbed by disagreeable dreams, of mis-carriage of his projects.
  41. At night frequent waking in a fright, as from a dream, as if he fell from a height or into the water.

**Remarks:** Dr. Francis Black, author of the excellent monograph on *Digitalis* in the recently published *Materia Medica, Physiological and Applied*, has we think very correctly observed that "the intestinal condition of digitalis is more towards diarrhœa than constipation." Poisonings show that the drug exerts an inflammatory action upon the stomach and also it would appear upon the descending colon. Hahnemann's symptoms, 187, 188, (*Materia Medica Pura*, Dudgeon's Translation) cited in this article as S. 2. of Diarrhœa, having been taken from sick people, it is doubtful if the ash-colored stools are due, as stated, to deficient biliary secretion, or to some defect in the secretions of the colon, as suspected by Dr. Hughes. "It causes

ash-colored stools ;" says he, " but not, I think, from any influence on the liver. Dr. Inman has shown that the feces do not become brown until they reach the colon, and that the green stools of infants assume their peculiar color at this point also. It would appear, therefore, that the secretion from the follicles of the colon has an important influence on the color of the feces ; and through these, I conceive, that digitalis whitens the stools, for it causes no other element of jaundice or sign of hepatic disorder. Now it is no uncommon thing to be consulted about children whose liver is said to be locked up, because they are passing white chalky stools. There is no jaundice ; and I do not believe the liver is here in fault at all, but that the secretion of the colon is deranged. Digitalis is a capital remedy for this condition, as pointed out by Drs. Chapman and Black." In none of the cases of poisonings and experiments cited by Dr. Black in his monograph, were *pale motions* observed, nevertheless he confirms by clinical verification what Hahnemann has recorded under this head. " Giddiness and pale motions a good indication for Dig. Useful in pale motions of children, especially of a scrofulous constitution." This seems to be the only use made of Digitalis in bowel complaints. We do not remember to have seen it used in either constipation or dysentery, though used according to indications furnished by the character of the stools and of the concomitant symptoms it may be eminently useful in these affections. The character of the pulse affords a valuable indication for Dig. It is to be noted also that notwithstanding the generation of flatulence under the drug there is no distension of the abdomen, on the contrary the abdominal walls are strongly retracted upon the intestines. Pulsations of the abdominal aorta are often met with in cases of diarrhœa and dysentery, and are, with anxiety and epigastric constriction, a genuine symptom of Dig.

## Gleanings from Contemporary Literature.

### DISEASES OF THE HEART SUBSTANCE

BY WILLIAM H. BURT, M. D., CHICAGO, ILL.

#### TREATMENT.

*Preventive.*—Although cardiac hypertrophy cannot be removed, still much can be done to arrest its development by removing the causes which produced it, or by rendering them inoperative. Hypertrophy of the heart is an important provision against the dangers incident to the accumulation of blood within the cavities of the heart, and against the evils of dilatation. Hypertrophy compensates for the disturbance of the circulation caused by valvular lesions, and so long as the enlargement consists of this compensating increase of muscular structure and power, the patient experiences little or no inconvenience, providing nothing occurs, like *anæmia*, to weaken the heart's action; but when hypertrophy is accompanied with dilatation, serious inconveniences referable to the heart and circulation begin to be felt, and then we should strive to modify or arrest the valvular lesions which give rise to hypertrophy.

To prevent hypertrophy and dilatation, the great aim of the physician must be, to keep up, if possible, the normal tonic of the muscular structure of the heart. To this end, the general nutrition of the body must be, as far as possible, improved by the use of a nutritious diet, taken in small quantities and at short intervals. Rest of body and mind is therefore one of the first and most essential elements in the treatment. Make every possible effort to quiet any undue nervous excitement, and irregular action of the heart. Avoid all influences that might stimulate the already over-excited heart, as coffee, tobacco, spirits, strong spices, etc. All sources of gastric disturbances should be carefully avoided, for a distended stomach easily excites an attack of palpitation. These patients should never allow themselves to be placed in such circumstances as to render sudden and violent exertion necessary, for a single violent physical strain may jeopardize life, especially in dilatation of the heart. Flannel should be worn next the skin, and the hands and feet kept warm. The greatest amount of fresh, dry, bracing air, and the best of hygienic surroundings possible should be secured. A sedentary life, attended by much excitement of mind, should be changed to a more active one, with less mental irritation. Anger should be particularly avoided.

All influences tending to debility, as nervous prostration, *anæmia*, or blood impoverishment, should be avoided. The main object of treatment is to prevent weakness of the heart. Excessive venery, diarrhoea, undue lactation, leucorrhœa, menorrhagia, purgation, a too meagre diet, and all losses of the fluids of the body in excess, tend to weaken the heart's action, and should be overcome by the best means known to the physician, and after all these measures have been carried out, they will be found to be but palliative and temporary in cardiac dilatation, for it is incurable.

In extreme cases of dilatation, confinement to the bed or couch, for a time, is a wise measure, and will often remove many of the troublesome subjective symptoms. If there is much venous engorgement, the application of dry cups over the back and præcordia often proves very efficacious. A milk diet, or koumiss often proves highly beneficial.

The principles of treatment recommended by Oertel, in Prof. Ziemssen's *Encyclopædia*, constitute nothing short of a revolution in cardiac thera-

pentics. Briefly, his system consists in *diminishing the volume of blood to be circulated* by increasing the excretions, and limiting the supply of water consumed, and in *stimulating the heart by severe muscular exercise in mountain climbing*. It cost the author nine years of hard study, to develop this doctrine, and establish it to his own satisfaction.

1. The disturbance of the distribution of blood within the circulation (venous fulness with dropsy, congestion of the lungs, and arterial anæmia), may be regarded as purely *physical* disorders irrespective of their anatomical cause, and they may be treated accordingly.

2. The *first indication* is to reduce the volume of blood which has to be circulated by limiting the amount of fluid ingested and increasing the excretion of water. Only 998.2 to 1062.2 grammes of water were allowed per diem in Oertel's cases including the water contained in solids; and the theoretical result was to reduce the weight of the fluid entering the blood in the course of twenty-four hours, to one-seventh of what it was previously. Increased elimination of water can be most thoroughly accomplished by the diaphoresis and pulmonary exhalation which, in a remarkable degree, accompany muscular exertion, especially *climbing*, by pilocarpin, and by the Turkish bath. The first is the most powerful method, an amount of water equal to one or two fifths of the weight of the blood being lost in the course of an ascent of several hours' duration. Diuresis is an unsuitable method, not only because (as a matter of fact) it cannot be kept up, but because the circulation is already disturbed within the kidneys, by the heart disease, and medicinal diuretics increase the irritation. Climbing, however, restores the proper balance of the circulation in the kidneys, and reduces any albuminuria that may be present.

3. The *second indication* is to relieve the circulation through the lungs, by increasing the length and frequency of the respiratory movements. This is best accomplished by *mountain climbing*, which acts as the greatest known stimulant to the respiratory organs, as shown by the dyspnoea, and increased pulmonary circulation, increasing the oxygenation of the blood, and the water of expiration. Thus Oertel describes a patient undergoing this treatment for a large flabby heart, with dropsy and albuminuria, as suffering from great dyspnoea, on commencing to climb the first mountain; he paused every eight or ten steps, and struggled for breath; there was almost cramp-like contraction of the muscles of inspiration, the heart palpitated violently, perspiration poured from the surface, and thirst became excessive. He was allowed to rest in the standing posture, to recommence the ascent as soon as possible again, to suffer as before.

4. The *third indication* is to strengthen the cardiac muscle, to remove the excess of fat, not only from the heart but the body generally; and this is best accomplished by means of *mountain climbing*, aided by a suitable diet, where the albuminoids are increased to thicken the blood more quickly. The best daily proportions in cardiac disease are, not more than 25 to 60 grammes of fat, and 100 grammes of carbohydrates, with not less than 150 grammes of nitrogenous material. The reduction of water helps to remove the fat.

5. Such complications as dropsy, renal disturbance, bronchial congestion and catarrh disappear when these indications have been fulfilled.

Climbing *exercises the heart*, and thus produces or restores hypertrophy. It increases the aspirating force of the heart on the veins, of the thorax on the veins, and of various groups of muscles on the veins, *e. g.*, at the groin, axilla, and the neck. The *tension* of the *arteries* falls by reflex relaxation of their muscular coat, and the vessels dilate; but an increased volume of blood being discharged into them at the same time by the increased action of the heart, the *pressure* rises at first and remains somewhat above the normal, whilst the *velocity* of the current is increased. Thus, as a result of

climbing, the heart empties itself more freely into the relaxed arteries, the venous and pulmonary flow being at the same time lightened, the proper balance of the circulation is restored. The reflex dilatation of the arteries produced by climbing, persists after the exertion is stopped, and tends to return with increasing readiness if climbing is repeated. It is of the first importance to note that in *walking on the level*, reflex dilatation of the arteries does not occur to the same degree as in climbing, and that the arterial pressure may rise higher in the former than in the latter form of exercise. Sharp exercise on the level is, therefore, no substitute for mountain climbing, for the heart and veins remain unrelieved in their effort to empty themselves into tight arteries. If hill or mountain climbing cannot be taken, *stair-climbing* will be found beneficial. Great care must be taken to prevent and reduce obesity by using a diet with an excess of nitrogenous elements, and a limited amount of fluids.

Professor Oertel treated in all thirty cases by this method. The result was that fifteen cases of fat heart with general obesity were completely cured; in seven out of eight cases, in which the heart was enlarged from gout, fatty degeneration, and from obesity, compression of the lungs and hypertrophy of the right ventricle from spinal curvature, or anæmia, compensation was completely re-established, and in all the other cases, including two of double mitral disease, decided benefit and relief of the symptoms followed.

Common-sense, as well as Oertel's careful observations, might suggest that in every case of big, fat, flabby heart, or cardiac failure, whether associated with dropsy or not, the driving power of the heart ought to be relatively increased by reducing the load, that is, by diminishing the volume of water in the blood, and this is best accomplished by *systematic mountain climbing*.

*Remedial*.—1. MAIN REMEDIES.—DIGITALIS, STIGMATA MAIDIS, CONVALLARIA, ARSENICUM, ARSENICUM IOD., NUX VOMICA, STRYCHNIA, IRON, FER. ET STRY. CIT., PHOSPHORUS, KALI HYD., ERGOT, SULPHUR, CALCAREA IOD., LYCOPodium, IODOFORM, PILOCARPIN, AMYL NIT., HEPAR SULPH., APIS MEL., APOCYNUM CAN., ADONIS VERNALIS, MORPHIA.

2. OFTEN USEFUL.—*Glonoine, Lycopus, Spongia, Plumbum, Aurum met., Bryonia, Cinchona, Chloral hydrate, Pulsatilla, Caffeine, Veratrum viride, Aconite, Tartar emetic, Cocaine.*

3. OCCASIONALLY USEFUL.—Gelsemium, Baryta iod., Mercurius iod., Sepia, Salicylic acid, Silicea, Kali nit., Kali acetate, Kali bich., Naja, Lachesis, Bromine, Cactus grand., Argentum, Ignatia, Collinsonia, Coca, Rhus tox., Spigelia, Lobelia, Squills, Iodine, Prunus virg., Colchicum, Kalmia lat., Conium, Belladonna, Laurocerasus, Tabacum, Hydrastis, Natrum mur., Graphites, Sanguinaria, Cimicifuga, Viburnum, Benzoic acid, Tarentula, Nitric acid, Muriatic acid, Phos. acid, Hydrocy. acid, Helonias dioica, Thuja, Uranium nit., Zinc, Phynn, Scillitoxine.

*Digitalis*.—This is the most useful remedy we have in the *Materia Medica* for *hypertrophy and dilatation*, whatever the cause may be that has produced it, where the heart's muscular power is especially deficient, with irregular, intermittent pulse, very slow when keeping still, but easily accelerated by any exertion. Oedema of the lungs and feet; copious serous exudations; bluish-red or pale face; sighing respiration, with sinking, weak feeling at the pit of the stomach; scanty, high colored urine, which is often albuminous. General feeling of anxiety and despondency. Frequent attacks of faintness, with nausea.

Professor Flint says: "As a remedy, with reference to irregularity of the heart's action incident to dilatation, *Digitalis* often manifests a truly remarkable efficacy. Of the different preparations the tincture is to be preferred, on account of its being more reliable as regards strength.

*Digitalin*, however, has still more this advantage, and is, perhaps, entitled to preference. Without discussing many different opinions, it may be assumed that, given in small or moderate doses, for example, from ten to thirty drops of the tincture, it cannot, under any circumstances, have much potency to do harm, and it cannot prove a dangerous remedy. That it renders the action of the heart slower and more regular, is undoubted. With reference to these effects, Bouillaud calls it 'the opium of the heart.' That it produces these effects without weakening the heart may be assumed, and clinical observation appears to show that under its use, the heart, already weakened by dilatation, acts with increased strength. With these views, it is a remedy, useful in cases both of hypertrophy and dilatation."

Dr. E. M. Haie says: "There is another fact relating to the use *Digitalis* in dilatation. This condition will cause various pathological conditions in other important organs—the lungs, brain, liver, and kidneys. Dilatation causes passive congestion, with consequent torpor of function in all these and other organs. Therefore, in cerebral, pulmonary, hepatic, and renal troubles, in vertigo, apoplexy, cough, hæmoptysis, jaundice, enlargement of the liver, dropsy, etc. you should always ascertain if cardiac debility is not at the bottom of the trouble. If you find this to be the case, *Digitalis* is the chief remedy always. . . If I were to name any group of symptoms indicating its use in dilatation, these would have the preference: quick, weak, irregular, or intermittent pulse; increased or deficient action of the heart, with deficient force or impulse, cough; hæmoptysis; jaundice; alternate scanty and profuse urine, sometimes albuminous; œdema of the feet, legs, face, and scrotum, ending in general anasarca; sighing respiration, with sinking, weak feeling at the pit of the stomach; sometimes with vertigo and amaurosis."

Sensation as if the heart would stop beating if she moved, with fear of impending death; worse in a warm room. Often when the feet become œdematous and the patient is cyanotic, it has a wonderful effect, entirely removing for a time all unpleasant symptoms.

*Dose*—The active principle *Digitalin*, used in the first three decimal triturations, is often more efficacious than the tincture. The tincture should be used in the first three dilutions, and in the majority of cases the tincture will have to be used, in from five to twenty drop doses, three times a day. The dose of *Digitalis* for the removal of dropsy by its diuretic action needs to be larger than when its tonic action alone is needed, and here the infusion of the leaves acts far better than the tincture. Steep one drachm of the leaves in a pint of water until one-half has boiled away; strain, and give from two to four drachms at a dose, two or three times daily.

*Stigmata maidis*—Corn silk bids fair to be one of the most useful remedies we possess for hypertrophy and dilatation of the heart, especially if associated with *bronchitis accompanied with copious expectoration*, and renal disease. Dr. Henri Dupont has made use of this drug in cardiac affections, and has recorded his impressions of its action as compared with that of *Digitalis* and *Convallaria* (*Union Médicale*, February 21st, 1884). In the trials he has made of it, during a period of three years, he has been struck with three facts: diuresis, slowing of the heart's action with improved rhythm, and the tolerance of the drug shown by the system. The diuretic action is almost always manifested at the very first, and goes on increasing up to the thirteenth or fourteenth day, and it is in cardiac affections, with œdema of the lower limbs or general dropsy, that the beneficial action of the agent is most prompt and the most evident. While the dropsy diminishes and often disappears, the arterial tension increases, and the venous tension is reduced concurrently; the general condition becomes decidedly improved, and in particular the author mentions a subjective feeling of calmness and *bien être*, except where there is pronounc-

ed dyspnoea. The latter symptom he has never known to be relieved. In hypertrophy and stenosis, the result has almost invariably been excellent. On the whole, the author thinks the *Stigmata* acts better than *Digitalis*, and with about the same energy as *Convallaria*, but that it is to be preferred on account of its not producing the unpleasant effects that sometimes follow the use of either of the latter drugs.

*Dose*.—The fluid extract is the preparation always employed by Dr. Dupont, never more than three grammes a day being given. He is guided as to the dose by the amount of diuresis—only enough need be given to produce free action of the kidneys.—*New York Medical Journal*.

*Convallaria*.—This remedy has of late been strongly recommended in heart affections, and seems to possess many of the beneficial properties of *Digitalis*; it increases the force of the cardiac contractions; at the same time it lessens the frequency of the beats; with the lessening of the heart-beats, it produces free diuresis. It is non-accumulative in the system; here it has the advantage of *Digitalis*. It has a tonic effect upon the digestive organs, and improves intestinal action. When *Digitalis* disturbs the functions of the stomach and proves cumulative, *Convallaria* will then be found a valuable substitute. Its action is often brilliant in paroxysmal palpitation due to nervous causes, and rapid, irregular heart-action dependent on debility. Heart feels full to bursting, from congestion, with much fluttering; reflex heart affections. Heart feels as if squeezed in a vice, alternately grasped and released. Dull, pressive pain in the region of the heart, with a feeling of a weight in the chest, with irritable generative organs.

*Dose*.—First the attenuations. When these fail, give the tincture from 5 to 20 minims as a heart tonic. Dose of the soft extract, 2 to 8 grains; fluid extract, 5 to 20 minims. The active principle, *Convallarin*, is a very powerful remedy; give the first three decimal triturations. The one-tenth of a grain should be given with caution. It is readily soluble in water. The *Convallarin* does not possess one-half the value of the glucoside of *Convallarin*. Toxic effects. The pulse becomes imperceptible, great oppression over the sternum and in the cardiac region, vertigo, nausea, flatulence, cold hands and feet, with a feeling of utter prostration that lasts from two to four hours.

*Arsenicum alba*.—This remedy acts better in dilatation of the heart than in hypertrophy, and especially if dropsical effusions have taken place, with general anasarca, attended with great debility and anæmia. Violent and irregular action of the heart, with feebleness or almost complete extinction of the pulse. Severe paroxysms of palpitation, with cardiac syncope. Great anxiety and fear of death; tightness in the præcordia; cannot lie down; dyspnoea and palpitation after the slightest motion; violent, tumultuous action of the heart, alternating with feeble, irregular breathing; great thirst, drinks but little at a time but often; great tendency to fainting. Cold skin, hands, and feet; the feet greatly swollen. The physical signs on auscultation and percussion are; Great dulness in the cardiac region on percussion; the element of impulsion in the first sound of the heart is impaired or lost, or sounds as if at a great distance; bellows-murmur with the first sound, heard over the left ventricle and along the aorta, but loudest over the aortic valves, at the edge of the third rib, near the left edge of the sternum. If the disease is associated with albuminuria, it is another strong indication for *Arsenicum*. There is a dry cough, excited by a sensation as if the fumes of sulphur were inhaled, with severe dyspnoea and nightly aggravation; burning pains in the chest, greatly aggravated by rest and relieved by motion; cannot lie down for fear of suffocation; wants to be in a warm room. Great loss of flesh; general dropsy; cadaverous smelling diarrhoea, with great enervation in the last

stages of the disease, with cold night-sweats. Lymphatic people that are *extremely sad* and irritable.

*Dose.*—Arsenicum will be found of great value in all potencies from the 3rd to the 1000th. In children the high attenuations will often do wonders. The *Iodide of Arsenicum* will often do better than the Arsenicum alb.

*Nux vomica, Strychnine.*—*Nux vomica* and its alkaloid *Strychnia*, we will consider together. In the majority of cases *Strychnia* will be found of more value than *Nux vomica*, for when they are indicated *prostration* and *loss of tone* will be found in all the important organs of the body, viz, the brain, heart, liver, stomach, intestinal canal, renal and sexual organs. All become the seat of morbid irritability and perverted function, and nothing will be found more useful to tone them up than *Strychnine*, especially if there is great spinal exhaustion and muscular paralysis. They are more particularly called for when we have *extreme irritability* and given to scolding, fault-finding with every one and everything about them is characteristic of *Nux vomica*. Suffers much from dyspepsia, especially those that live high or take intoxicating liquors; greatly troubled with acidity of the stomach, and constipation with hemorrhoids; much flatulent colic, with *ineffectual urging* to stool. Aggravations in the morning and from cold. Relieved by warm air and in damp weather.

Hypertrophy of the heart from portal obstruction, with frequent paroxysms of palpitation, accompanied by belching of gas and food, or dilatation of the heart, with very feeble action of the heart and many dyspeptic symptoms; aggravated after eating and from mental emotions.

*Dose.*—As a rule, the first three dilutions of *Nux vomica* will give the best results. *Strychnine* will give the best results when used from the second to the sixth decimal triturations.

*Iron*—Cases that are benefited from the use of Iron are more particularly young people, suffering from anæmia under the mask of plethora and congestion, accompanied by a *whitish color* of the mucous membranes. Relaxation and weakness of the whole muscular system; feeble digestion and coldness of the extremities. The *least emotion or exertion* produces a *red flushed face*. Face suddenly becomes fiery-red, with vertigo, ringing in the ears, palpitation of the heart; dyspnoea, with a dry cough. Low bellows-sound of the heart from anæmia; dilatation of the heart with fatty degeneration. Licentia, stools of undigested food that are painless. Edematous swelling of the body; constant chilliness; evening fever; hemorrhagic tendency. Diseases coincident with dropsical conditions, great coldness of the body at night; short breathing, worse in cold air and better in warm air. Walking slowly relieves, but if fast, it produces great languor and faintness, with blackness before the eyes; hard beating of the heart; pulse full, hard, and slow, greatly quickened by exertion. Anxious breathing; chest feels constricted, with a feeling of spasm of the heart. Iron enters the blood and stimulates the trophic nerves, until the blood-making process goes on in a normal manner.

*Dose*—All the preparations of iron are useful in hypertrophy and dilatation of the heart, when it co-exists with anæmia, but *not in pernicious anæmia*; these latter cases call for Arsenicum. Take the idiosyncrasies of each patient into consideration, as well as the bodily constitution. In uncomplicated cases, *Ferrum metallicum* will be found sufficient. If fatty degeneration has taken place, use *Ferrum phos.* or *iod.* If dyspeptic symptoms predominate, *Ferrum et strychnine*, or the lactate. In bad cases, the muriate may do the best. Use the first three triturations. My favorite form of iron is the *dialyzed*, five to ten drops of the crude drug being given three times a day.

*Phosphorus*—In dilatation or hypertrophy brought on rapidly from endocardial inflammation, puerperal fever, typhus, scurvy, variola, or

yellow fever, associated with dissolution of the blood, Phosphorus will take the precedence over every other drug. Phosphorus produces the typical fatty heart and arteries. The microscopic examination of the muscles of the heart shows excessive fatty degeneration, and that they are full of a large quantity of fine brown granules. The cardiac tissue is brittle, and appears fatty both to the touch and to the eye. The fatty degeneration of the heart is, according to Bamberger, a disposition of fatty granules in the primitive fibres, so that the whole muscular texture is lost, and the sarcolemma is filled up with closely standing fat molecules. The heart becomes more and more feeble as the fatty degeneration progresses throughout the whole body. More particularly called for in tall, slender people, with fair skin, sanguine temperament, that complain, in addition to their heart-trouble, of a sensation of weakness and emptiness in the abdomen; this distresses and aggravates all the other symptoms, and is the real ruling key for the use of Phosphorus. This is doubtless due to portal congestion. Violent palpitation of the heart on slight motion, with marked hollows murmur, synchronous with the systole of the heart, showing that there is venous stagnation of the right side of the heart. Anxiety about the heart, associated with nausea, and a peculiar sensation of hunger. Pulse rapid, weak, and soft. When associated with dyspepsia, it is intermittent. Severe congestion of the chest, as if a weight were lying upon it; patient has to sit up in bed to get relief; feeling of suffocation. When the heart symptoms are associated with pneumonia of a typhoid form with hepatization of the lung, face livid, brickdust or bloody expectoration, and severe, hard, dry, exhausting cough, the larynx seems lined with fur, and is very sensitive to cold air. Burning heat between the shoulders, legs and feet, very cold and œdematous.

*Dose*—Use the first ten dilutions, the first three being the most useful.

*Kali hydriodennm*—This remedy is especially useful in old syphilitic subjects afflicted with rheumatism and glandular swellings, aphthous sore mouth. Many rheumatic pains in the limbs, aggravated by cold air and at night. With the cardiac trouble, there exists much bronchial irritation, with hollow, dry cough and dyspnoea. Patient is troubled greatly with chronic nasal catarrh, and nightly bone pains, greatly aggravated by cold and rest, relieved by motion. The hypertrophy and dilatation have been caused by repeated attacks of inflammation of the heart, and the patient has been mercurialized. Pulse rapid and intermittent. If there exists effusion in the pericardium and pleural cavity with general anasarca, the Iodide of potash has great power in causing absorption of this morbid product, in subacute and chronic cases.

*Dose*—Use the first three dilutions. In some cases, in old syphilitic subjects, the crude drug should be used, from one to five grains at a dose three times a day.

*Ergot*.—The action of this drug upon the heart and arterial system is very specific and powerful. In large doses, the action of the heart is greatly lessened, the arteries strongly contracted, while the veins are greatly dilated. The slowing of the heart action and the arterial capillary contraction, is believed to be the secondary or real curative effect of Ergot, while the dilatation of the veins is supposed to be its primary action. In hypertrophy of the heart the action of Ergot has been marked and favorable. Ergot has produced fatty degeneration of the heart, and when this takes place in dilatation, this drug will be one of the best.

Especially indicated in thin, scrawny, cachectic constitutions, continually complaining of being cold. Are in constant fear of death, great melancholy. In women there is a constant sensation of pressure, and bearing down sensation in the uterus, with profuse discharge from all the secreting outlets. Pulse small, rapid, frequently intermittent, or slow and suppress-

ed. Often has palpitation of the heart at night. Heat applied to any part of the body greatly aggravates, so much so that there is extreme aversion to covers. Relieved from cold.

*Dose.*—As a rule, this drug will have to be given in the fluid extract, in from five to twenty drop doses, three times a day. In women and children, the dilutions from the first to the thirtieth.

**Sulphur.**—This drug is not, strictly speaking, a cardiac remedy, but its specific action upon serous membranes, and the power it has over obstinate inflammations that have passed to the stage of plastic exudation, makes Sulphur one of our most potent remedies. The power it has to cause the absorption of plastic lymph is not excelled by any drug. This plastic exudation into the pericardium and pleural cavity is a prominent symptom in the last stages of hypertrophy and dilatation of the heart. It is particularly called for when we have a sensation of constant heat on the top of the head. Feels very weak and faint from 11 to 12 M; cannot wait for dinner; great heat in the palms of the hands and soles of the feet; at night has to put them out of bed to get them cool; sudden flashes of heat which soon pass off with moisture and debility; feeling of suffocation, must have the doors and windows open. All the secretions are exceedingly acrid; morning diarrhea that drives the patient out of bed in great haste; can't wait, must go to stool as soon as the desire is felt, or chronic constipation with bleeding hemorrhoids. Patient gets almost well, when the disease returns again and again. Patient has much rattling of mucus in the lungs, with loose cough. The changes in the weather greatly affect the patient.

*Dose.*—From the mother tincture to the two-hundredth dilution, the first six attenuations being the most useful.

**Calcarea iod.**—The iodide of lime will be found of great value in subacute and chronic cases of hypertrophy and dilatation of the heart, dependent upon valvular disease, especially in young people and children. Accompanied with serous effusion in the pericardium and pleura, with all their attendant symptoms.

*Dose.*—The first three triturations. In some severe cases, use the crude drug. **Iodine.**—*Iodine* alone will be found of more value than when it is combined with lime. In these cases there will be found great emaciation, profound debility, general cachectic state of the system, with a remarkable degree of weakness and loss of breath when walking or going up stairs. In women the mammae dwindle away, and there is long-lasting uterine hemorrhage, with excessive prostration. Symptoms all aggravated by heat and at night. Relieved by cold air.

**Lycopodium.**—This is a grand remedy in subacute and chronic cases of hypertrophy and dilatation of the heart, when it is complicated with dyspeptic symptoms, much flatulence and constipation, much horborygmus in the left hypochondrium, and great excess of lithic acid gravel in the urine. Marked palpitation of the heart with flatulence, and difficulty in breathing; hydropericardium; patient cannot lie down for fear of suffocation, has a loose, rattling cough; perspiration only on the chest; great disposition to take cold at every change of the weather. Symptoms aggravated from 4 to 8 P. M., by heat and lying down. Relieved by motion and in the early morning.

*Dose.*—From the sixth to the two-hundredth dilution, the thirtieth being the most useful.

**Iodoform.**—In chronic cases of hypertrophy, and especially dilatation of the heart with fatty degeneration, Iodoform will prove a valuable remedy, particularly when there is lessened blood-pressure, with a very frequent pulse, from a weakened heart. The specific indications for this remedy are not known, but time will prove it to be one of great value. Large doses lessen the heart-beats, while they increase the arterial tension.

Dr. M. Testa, of Paris, gave Iodoform in five cases of noncompensated valvular disease, in  $\frac{1}{4}$  grain doses, 4 to 6 times a day. It diminished the dyspnoea and oedema, increased the volume of urine, steadied the heart, and removed hæmoptysis.

*Dose.*—One-fifth to one-tenth grain, every two or four hours.

**Pilocarpin.**—In hypertrophy and dilatation, with dropsical effusions, that have come on suddenly, no known remedy will remove the dropsical effusions so rapidly as the Pilocarpin, administered hypodermically. The circulation is greatly excited with lessened blood-pressure from a feeble heart, when large doses of Pilocarpin are taken. Mr. Langley says: "The pulse is increased in man from forty to fifty beats, the accelerated rate continuing more than four hours; at the same time the pulse is weaker. The final arrest of the heart, which occurs in diastole, is preceded by very irregular action; the ventricles always stop first." Bartholow says: "It is a remedy of great value in cardiac dropsy, its therapeutic power being much the same as the vapor-bath, by promoting free diaphoresis. Ascites, hydrothorax, and pleuritic effusions have been quickly removed by this agent."

*Dose.*—Hypodermically use from  $\frac{1}{8}$  to  $\frac{1}{2}$  a grain. For an adult, it is usually best to give twice daily  $\frac{1}{4}$  of a grain at first, and gradually increase it, to keep up its action. When Jaborandi is used, give from five to fifty drops of the tincture at a dose or the fluid extract, five to twenty drops three times a day. But these large doses nauseate the patient, and are taken with difficulty, consequently, I greatly prefer the Pilocarpin hypodermically.

**Amyl nitritum**—This remedy is more particularly useful in acute and subacute cases, with greatly quickened and often irregular action of the heart. The whole arterial system is relaxed, from partial inhibitory paralysis of the sympathetic nervous system, with much præcordial anxiety. Flushing of the face and neck, with heat and perspiration of the same, accompanied with cold hands and feet. These frequent hot flushes constitute the greatest key for the use of this drug. Consequently, it will be found more useful in women at the climacteric than at any other time. The flushings and perspiration, so characteristic of this drug, are caused by partial paralysis of the sympathetic ganglia that control the circulation. When there is much pain about the heart, especially as in angina pectoris, with a great deal of congestion of blood to the heart, Amyl nitrite by inhalation often relieves the patient at once. In some cases with hydro-pericardium, it will act as a potent diuretic, and relieve the patient immediately. In these cases the blood-pressure is high during the paroxysm, with an excited and irregular heart.

*Dose.*—Put from three to five drops upon a handkerchief or a piece of blotting-paper, and inhale it for five minutes at a time, every half hour, hour or three times a day.

**Hepar sulphur.**—In subacute, or more especially chronic cases, of hypertrophy and dilatation of the heart, with fatty degeneration. Great disposition to take cold; sweats day and night without relief, especially about the chest, with a sour smell, cannot bear to be uncovered, has a loose, rattling cough, when any part of the body is uncovered; laryngo-tracheal catarrh with much hoarseness; great sensitiveness to cold air. Has been mercurialized. Has an unhealthy skin, which cracks and runs into suppuration from slight injuries. Feeble but rapid pulsation of the heart, with hoarse, anxious wheezing, aggravated by lying down. The dyspnoea is very marked and suffocating; lips and face blue, from collection of fluid in pericardium and pleura.

*Dose.*—The first three triturations. Some case may require to go up higher, to the 30th or 200th.

*Apis mellifica*.—This is one of our most valuable remedies in subacute and chronic cases of hypertrophy and dilatation of the heart, when there is great oppression; inability to lie down, from hydro-pericardium; absence of thirst; urine dark-colored, like coffee, and scanty. After scarlatina; no thirst. Rapid swelling of the cellular tissue, with redness, burning and stinging pains, soon followed by acute oedema and dropsy; the legs and feet become greatly oedematous. Dropsical effusion, with stinging pains, is the greatest characteristic for this drug. Great feeling of suffocation as though the patient would smother, with suffocating cough. Feeling about the heart, of great anguish and sense of suffocation. Pulse feeble, hard, small, intermittent, and rapid, often changing in character. Chest feels as if beaten, jammed or bruised. Albuminuria and general dropsy; the legs and feet are enormously swollen, numb and stiff, can hardly walk. Aggravated in cold weather, at night and in over-heated rooms. Headache relieved by pressure; washing in cold water relieves the skin affections.

*Dose*.—First six potencies. In obstinate cases, the first and second decimal triturations will act the best. Should be prepared fresh often.

*Glonoin*.—This drug will be found of great value in subacute cases, where the arterial tension is habitually high, and in which repeated paroxysms of angina are apt to occur with great mental excitement; congestion of the heart; throbbing in epigastrium. The violent action of the heart causes distinct pulsations to be felt all over the body, even in the fingers. Feeling of great fullness of the head, as if it would burst, with violent throbbing headache, aggravated by motion, and especially by heat; especially useful for women at the climacteric with hot flushes and throbbing headache. This drug finds its most useful sphere in arresting the acute symptoms that may arise in hypertrophy and dilatation of the heart, acting more as a palliative than as a permanent curative agent.

*Dose*.—The first three dilutions. Second decimal the most useful.

*Lycopus Virginicus*.—In hypertrophy and dilatation of the heart associated with pulmonary troubles, such as congestion, hæmoptysis, dyspnoea, dry cough; action of the heart rapid and hard, similar to *Aconite*.

*Dose*.—First three dilutions. Tincture most useful.

*Spongia*.—In subacute and chronic cases of hypertrophy and dilatation, where the symptoms are similar to those of *Iodine*, caused from structural changes in the valves, with fatty degeneration, feeble pulse, and plastic exudation into the pericardium, dyspnoea, cannot lie down for fear of suffocation. Some cases are associated with exophthalmus and its attending symptoms.

*Dose*.—First six triturations. The second the most useful.

*Plumbum*.—In chronic cases of hypertrophy of the heart, *Plumbum* will be found useful when there is a slow, weak pulse, a husk walk produces violent palpitation, with great anxiety about the heart, obstinate constipation, the feces composed of lumps packed together like sheep's dung, with severe colic and contracted abdomen. The colicky pains proceed from the spinal cord, with sensation as if drawing in from the abdomen to the back, accompanied by great depression of spirits. Raue says *Plumbum* is indicated in hypertrophy when there is a "stitch in the region of the heart during inspiration, with anxiety; heat and redness of the face; rush of blood to the region of the heart during a rapid walk, anguish about the heart, with cold sweat; palpitation. Post-mortem after poisoning has shown that the serous coat of the pericardium is lined with a layer of reddish gray, fine, villous, meshy, firm, exuded lymph. The heart is more than double its normal size. The wall of the left ventricle is more than an inch thick."

*Dose*.—From the third to the thirtieth dilution.

*Aurum met.*—Chronic cases of hypertrophy and fatty degeneration, with dilatation, accompanied by extreme depression of spirits and a suicidal

tendency, dwells constantly on the idea that he has heart disease, and that he is going to die suddenly. Great difficulty in breathing, after walking, with violent palpitation of the heart, and a weak rapid pulse, suffocative cough, or a hard dry cough, worse at night. Enlarged lymphatic glands similar to Mercury. Patients that have been mercurialized, or are suffering from tertiary syphilis. Aggravation from motion, in cold air and in the morning.

*Dose.*—First six triturations.

*Bryonia alba.*—In acute rheumatic cases, where there are severe stitching pains greatly aggravated by motion, with exudation of plastic lymph into the pleural cavity or pericardium, accompanied by inflammation of the pleura, bursting frontal headache, excessively irritable, friction murmur always present; fever, of a rheumatic character; patient cannot sit up on account of nausea and faintness, has dry, cracked lips; everything tastes bitter; obstinate constipation, hard, dry cough. Symptoms all aggravated by motion, in cold air and at night. Especially useful after the Aconite stage has passed; the patient feels sore as if bruised all over. All the symptoms simulate rheumatism, or are of a rheumatic origin, valvular lesions, that have a rheumatic origin.

*Dose.*—The dilutions from the first to the two-hundredth, the first three being the most useful.

*Cinchona.*—This drug, or its alkaloid the Sulphate of Quinine, is especially useful in hypertrophy, but more particularly, dilatation of the heart if it is associated with or produced by malaria, loss of the vital fluids, long-continued loss of sleep; the vitality has sunk very low, with great debility, anæmia and œdematous swelling of the lower extremities; enormous distension of the abdomen with gas, that aggravates the heart disease. Diarrhoea of undigested food, with much hyperæmia of the liver. Congestive headache; singing and roaring in the ears. Cough, with much rattling of mucus in the lungs. Palpitation of the heart, with rush of blood to the head; distressing constriction and anxiety about the cardiac region; weak, rapid pulse.

*Dose.*—From the first to the thirtieth dilution. When the Sulphate of Quinine is used, it should be given in doses of from one to four grains *ter die*.

*Chloral hydrate.*—The paralyzing effects of Chloral, manifested by great diminution of the arterial blood-pressure, from its direct action upon the heart-muscle, but also, in part, due to vaso-motor paralysis, leads to its use in hypertrophy and dilatation of the heart, especially if the function of the pneumogastric nerve is disturbed, as shown by the slow, full, irregular, or rapid respirations. Stertorous breathing is a marked feature after toxic doses have been taken. In poisoning, in man, the pulse has, towards the last, been very feeble, generally rapid and irregular, and, in some cases in which recovery has occurred, it has been absent for a time. In heart disease with great dyspnoea and sense of suffocation, the dyspnoea and suffocation being strongly marked; oppression of the base of the chest; tendency to faint, with sinking at the pit of the stomach; livid lips; slow respiration, pulse weak and fast; general anæmia; cold extremities; œdema of the ankles, feet, and often of the face; great debility, with extreme despondency and sleeplessness, due to overwork; physical fatigue; anxiety and great mental strain; Chloral in the proper dose will do valuable service. More useful in the later stages, especially when palliatives are required.

*Dose.*—From one to thirty grains, according to age. A good rule is, to give to a child as many grains as he is years old, up to the age of twenty. It should be administered in the *Syrup of Tolu*, or some other weak syrup.

*Pulsatilla.*—This remedy does not act specifically upon the heart, but, from its wonderful action upon the gastro-intestinal canal, many symptoms

are cured that greatly aggravate the heart disease, viz., dyspepsia in its worst form. The patient always has a very bad taste in the morning, with thickly-coated, white, or yellow tongue; sour stomach from the least digression in diet, especially bad effects from rich fat food; spitting up of sour food; much flatulence, mucous diarrhoea, worse nights; craves fresh, cool air, symptoms greatly aggravated in a warm room, and are very changeable, well one hour and sick the next; patient feels chilly, and is always complaining of the cold; nervous palpitation of the heart; rheumatic irritation of the heart, the pains shifting rapidly from one part of the body to another. Very affectionate females, with blue eyes, yielding disposition, easily excited to tears; women that are inclined to become fleshy, with delayed and scanty menstruation. Loose, rattling cough, that makes the stomach sore, and causes emissions of urine at every paroxysm of coughing.

*Dose.*—From the first to the two-hundredth; the first three dilutions being the most useful.

*Caffeine.*—The Citrate of caffeine is a very useful cardiac tonic, though not as powerful as *Digitalis* or *Stigmata maris*. It slows the action of the heart, while, at the same time, it increases the force of the cardiac contractions. Its most powerful and useful effect in hypertrophy and dilatation of the heart is, its diuretic action when they are associated with dropsical effusions and general oedema. Caffeine has a direct specific action upon the secreting structures of the kidneys, and does not produce its diuretic action as *Digitalis* is supposed to do, entirely by increasing the blood-pressure. Caffeine acts also upon the cardiac muscle, or its contained ganglia, producing great irritability, in which the slightest excitement is sufficient to bring on irregularity and violent palpitation of the heart; oppression of the chest, asthma at night, and great nervous excitability; fainting from sudden emotions. In acute cases, where much effusion has suddenly taken place, large doses of Caffeine, so as to get its diuretic action, will be found invaluable.

*Dose.*—From three to six grains of the Citrate should be given at a dose, three times a day, to produce diuresis. Has no cumulative tendency like *Digitalis*, and is easily taken by the feeblest person.

*Veratrum viride.*—In the first stages of hypertrophy and dilatation, where they are caused by some acute affection, and are of a congestive or rheumatic origin, ushered in by violent fever, full, hard, bounding pulse, throbbing carotids, much congestion of the chest and head; the pulsations are full, hard, and bounding, sometimes irregular and intermittent. In some cases, small doses will be useful when the pulse is soft, feeble, but very slow, hesitating, or intermittent; excessive irritability of the heart, so that the slightest motion, in bed, or sitting up, causes faintness, vertigo, blindness, with a very pale face. There is often great burning distress in the chest, with a sensation of a heavy load on it; rapid, labored, and sighing respirations. But the great field of usefulness for this drug will be found in those cases where the disease has just started, or has been suddenly aggravated from some cause so as to produce excessive action of the heart, with a full, hard, and bounding pulse. When this is the case, no known remedy will soften and bring down the pulse to normal, and below, equal to the *Veratrum v*. Large doses of *Veratrum viride* paralyze the cardiac inhibitory apparatus, while small doses (high attenuations) stimulate it greatly. And these two effects of this drug can often be apphed with advantage to the patient.

*Dose.*—To get the tonic action of this drug it should be given in the attenuations from the first to the thirtieth; the first three being the most useful. To get its debilitating action, and lower the blood-pressure, give from two to five drops of the tincture, or from one to three drops of the fluid extract, every one, two, or three hours. When nausea and vomiting are produced, the dose should be greatly lessened or stopped altogether.

**Aconite.**—In the first stages of acute cases ; where the skin is very hot, temperature high, with burning and intense thirst, scanty red urine, great congestion or inflammation of the heart and its appendages, that has not passed into the stage of effusion, but up to this stage, where there is a rapid, hard, and bounding pulse ; the countenance expresses great anxiety, and there is *great fear* of death, the patient is extremely restless, and tosses about continually ; or if there is severe burning, constrictive sensation in the chest, with stitching pains ; the position of the patient is on the back, with the head and shoulders raised, every movement aggravates the pain and causes extreme irritability of the heart, with hard, rapid pulse, rapid respirations, and tendency to faint ; dry cough, aggravated at night. In chronic cases where, at any time, these acute symptoms come up, from sudden changes in temperature from warm to extreme cold weather, suppressing the perspiration greatly aggravates the heart trouble. There is no remedy that will moderate excessive heart action better than Aconite, but when it is given in doses large enough to produce depression, its use must cease at once or great harm will be done to the patient. The use of this drug is principally to palliate acute symptoms that may at any time arise ; after this has been accomplished, some real heart tonic must be selected, as Digitalis, Stigmata mardis, etc.

**Dose.**—From the first to the two-hundredth attenuations, the first six potencies being the most useful. To get its depressing action, give from two to five drops every one, two, or three hours.

**Tartar emetic.**—In hypertrophy and dilatation, complicated with pulmonary congestion ; cannot lie down, cardiac asthma, the dyspnoea is of a very severe character, with loose rattling cough, the lungs seem loaded with mucus, expectorated with great difficulty ; pulse small, thready, irregular, feeble ; heart's action very feeble and irregular ; enlargement of the liver, with jaundice and frequent attacks of vomiting ; great thirst, day and night. With the heart affection there is emphysema, bronchiectasia, with a very copious accumulation of mucus in the bronchial tubes. This accumulation forms a mechanical obstruction to respiration, producing a group of symptoms of carbonic-acid poisoning, more or less pronounced ; great anxiety and agitation, pale and bloated face, coma or delirium, with coldness of the extremities ; profuse cold sweat, not followed by relief. The cough is aggravated by speaking, eating, and a recumbent posture, in damp, cold weather, and from getting warm in bed, relieved by cold air.

**Dose.**—The first thirty dilutions, but those that will be of the greatest value will be the first six triturations, given one to two grains at a dose, every two or four hours, according to circumstances.

**Apocynum can.**—In hypertrophy and dilatation of the heart, associated with hydro-pericardium, and general dropsy, the renal organs being prominently involved, their mucous membrane not only being affected, but the whole vascular system of the kidney, the increased blood-pressure is very great. The urine is very scanty and dark-colored. Acute inflammatory dropsy. The hydro-pericardium is so great that the patient can hardly speak for want of breath ; cannot remain in a recumbent position, the difficulty of breathing is so great ; lying down produces violent dyspnoea ; suffocating, dry, hacking cough, with nausea, and great sense of weakness, and goneness in the region of the stomach. Frequent palpitation of the heart, especially on motion, pulse small and irregular ; vitality greatly lessened. Skin dry, or cold and clammy ; general oedema of the legs and feet. Has many rheumatic symptoms with the dropsical condition. When Apocynum acts favorably, the secretion of urine is greatly increased, and the skin becomes moist. Aggravations from sudden changes in the temperature from warm to cold. Better in warm weather and during the day.

**Dose.**—First six dilutions will often be sufficient, but in many cases, to get its diuretic action, from five to fifty drops of the tincture will have to

be used once in every two to four hours.

*Opium*.—This drug, in some of its forms, especially the *Sulphate of morphia*, will have to be employed in the last stages of hypertrophy and dilatation as a palliative. The continuous dyspnoea and orthopnoea, which are often so distressing in the last stages of this disease, which is nearly always associated with great general exhaustion and obstinate insomnia, are materially mitigated by the use of *Morphine*. And the humane physician should never allow his prejudices to so get the mastery of him as to prevent the administering of a remedy that will so soothe and comfort a patient during his last hours of earthly existence, allowing him to go out of this life free from all pain and suffering; and, at the same time, the loved ones, that are so tenderly watching and serving him, will bless the Creator of the universe for giving us means that will, even in the agonies of death, so soothe our aching bodies that we can die in peace, and go to that blessed home where sickness and sorrow, pain and death, are felt and feared no more.

*Adonis vernalis*.—This is a new cardiac tonic, very similar in its action to *Digitalis*, but non-accumulative in the system. Its action is to stimulate both the inhibitory apparatus and the motor ganglia of the heart, to increase the contractility of the cardiac muscle, and to cause the contraction of small arteries in different parts of the body, without affecting the vaso-motor centre. It is more particularly indicated in cardiac dilatation, with a rapid, weak pulse, or it may be irregular and intermittent, with venous stasis, associated with general dropsy, the kidneys sympathizing, and the urine being loaded with albumen. Under the action of *Adonis*, in secondary heart disease associated with dropsy, the cardiac contractions increase in force, the pulse becomes less frequent, more regular and full, the urinary secretion increases tenfold, the albumen disappears, specific gravity diminishes, and the urine changes from a dark brown to a very pale color, with increase of the chlorides and urates; the ascites and hydro-pericardium with the œdema of the legs disappear. The dyspnoea and palpitation of the heart are greatly relieved the first day, and in a few days a marked change for the better is produced in the patient.

*Dose*.—Of the infusion, one drachm to six ounces of water, a large spoonful once in two hours. Of the fluid extract, from two to ten drops, once in three hours. *Adonidine*, the active principle, is more active than *Digitalin*, and should be given with caution. In too large doses, it acts as a violent drastic cathartic. One-hundredth of a grain should be given at a dose, once in three hours, to adults; in children, from the third to the tenth trituration.—*The Hahnemannian Monthly*, July 1885.

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CROTALUS AS A REMEDY.

(*Continued from p. 350, No 9.*)

In considering the action of Crotalus and of other serpent poisons on the respiratory organs, we shall have to remember that a part of the respiratory apparatus, the Larynx, has been appropriated, to sub-serve a function different from that of respiration, namely, the production of voice and of articulate speech, in addition to its function of aiding inspiration and expiration.

At the serpent poisons we have been considering have a powerful action on the larynx. Under Crotalus there are pains in the larynx as in other parts of the body, and it is tender to the touch. Under Lachesis the larynx is described as not only painful to touch, but swollen, sore, raw, rendering deglutition difficult on that account; the pain in the larynx is felt on bending the head backwards; the larynx feels obstructed by a foreign substance, as if a plug were fixed in it, which moved up and down, with a short cough. The provers of Cobra did not experience any pain in the larynx. Irritating, raw, rough pain is reported by one. There was a feeling of clogging up of the larynx and trachea with thick mucus which was hawked up with difficulty. A tightness in the larynx was felt on getting into bed. Uneasy constriction, irritation, tickling, pricking are also felt.

The irritation is like that felt on inspiring irritating vapor, with a sensation of warmth and rawness. Increasing tenderness is reported over the trachea (not larynx).

Hence it appears that, so far as provings have gone, while *Crotalus* and pre-eminently *Lachesis* have been found to set up an inflammatory action in the larynx, *Cobra* has been found to act only on its nervous supply, without causing any inflammatory lesions.

There are hoarseness, weakness and even loss of voice under the influence of all these poisons. Under *Lachesis* the hoarseness increases while speaking; the voice will not come, as if something in the larynx prevents it, which must be hawked up. Under *Cobra* the hoarseness increases towards night, but is better on awaking from sleep; the loss of voice is accompanied by partial or full unconsciousness.

Under *Crotalus*, "the mucous membrane of the trachea and of the bronchi was notably injected; a patch corresponding to the cricoid cartilage was inflamed. The trachea and bronchi were filled with reddish frothy serum." Under *Lachesis*, after the midday nap the trachea seemed narrowed; no mucus could be loosened as usual; there was stitch through the trachea. Under *Cobra*, as before described there was clogging up of the trachea along with that of the larynx; irritating, raw, rough pain in trachea (as if it had been skinned); tickling, and sensation as of a hair, in the trachea; increasing tenderness.

Under *Crotalus*, the lungs (in a human subject), after death from bite on hand, were found crepitant throughout but presenting the first stage of sanguineous engorgement; (in a cat) were deeply congested and much ecchymosed, with deep red gelatinous effusion about roots; (in a pigeon) there were large extravasations of dark blood, soaking through the tissues of the lungs to such an extent as to make it impossible to say whether it was fluid or coagulated. The pleuræ were found congested, and even inflamed.

Under *Crotalus*, the respiration becomes embarrassed and anxious; quick and laborious, or slow and laborious; stertorous; intermittent, panting, jerking, convulsive, gasping. The Cheyne-Stokes character of the respiration was observed in a dog, after a second bite on the neck,—eight or ten rapid respirations, alternating with a pause of twenty seconds. Under *Lachesis*, the respiration becomes rattling during sleep in paroxysms;

difficult, also on account of stitches in the chest; impeded in the evening after eating a little; unable to get breath, must sit up, then rattling of mucus, with efforts to vomit, whereby only mucus is raised. Desperate fits of suffocation. Under Cobra, the respiration has been reported to be shallow, hardly perceptible, could only be recognized by the hand on the abdomen, extremely laborious; gasping. In all our experiments with the Cobra poison on the lower animals we have observed that the respiration is considerably increased in number at first, and then almost suddenly becomes slower till it ceases altogether. This accords with the results of the recent researches of Drs. Weir Mitchell and Reichert with the poisons of the *Crotalus*, *Moccasin Piscivorus*, and the *Cobra*. They say that the "venoms exert a double action on the respiration; first, an irritant action on the peripheries of the pneumogastric nerves, by which the increase in the respiration rate is brought about; and secondly, a depression of the respiratory centres, by which the respiration rate is diminished."

Besides the abnormal modifications in the rhythm and rate of respiration above described, all these poisons produce that violent modification in the respiratory act known as coughing. A knowledge of the physiology of coughing is necessary in order to understand how this is brought about by various drugs. We need hardly tell our readers that coughing consists of three stages, a deep inspiration, then closure of the glottis, and then a sudden explosive expiration. Its use is to expel any substance, solid, fluid, or gaseous, which may be in the respiratory tract below the larynx, or even above it, and whose presence is injurious. It may be brought on voluntarily, but it is generally due to some abnormal irritation, peripheral or central.

It is important to know the various parts of the body whose irritations give rise to coughing. The respiratory function is governed through the pneumogastric nerve. Hence irritation of the peripheral branches of this nerve distributed to the respiratory organs, especially to the larynx, is the chief source of the reflex action which gives rise to cough. But it is singular that a cough can only be discharged from the glottis respiratoria and no other part of the larynx, only from the bifurcation and no other part of the trachea. But coughs can be produced from irritation of

the bronchial mucous membrane, of the pulmonary tissue, of the pleura. Coughs can also be excited by irritation of distant sensory nerves, as of the nose, the pharynx, the stomach, the liver, the spleen, the intestines, uterus, ovaries, mammae, external ear, and even of certain cutaneous areas, especially of the upper part of the body. It has to be ascertained if these latter irritations act directly upon the coughing centre in the medulla oblongata, or through the modification of the blood supply and consequent secretion of the respiratory mucous membrane. The frequent association of vomiting with severe coughing is explained by the fact of the pneumo-gastric nerve being distributed both to the respiratory apparatus and the stomach.

*Crotalus* has a good deal of wheezing and coughing; dry cough with tickling in throat, at night; cough in the evening, with soreness in the chest; cough with expectoration of bloody mucus. It is reported by Dr Atchison that a young lady, who had whooping cough at the time she was bitten on left instep by a *Crotalus*, on recovering from the effects of the poison, found to her great surprise and gratification that her cough was gone, and did not return.

*Lachesis* has cough in the evening; cough while or after drinking; cough during sleep, of which the patient knows nothing; cough worse after every sleep, after walking, especially after talking (as though the throat became dry thereby), after eating fish, and in damp weather; cough caused by pressure on larynx; uninterrupted cough from slightest irritation of lungs, as from tobacco smoke; short, hacking cough, incessant at night, caused by crawling in throat; dry cough in the evening, with stitch through the air passages; with pain in trachea, and horrible taste of the expectoration, as after eating salt fish; dry, hacking cough caused by touching the throat; cough without expectoration, causing vomiting, fluttering, nervous cough, unattended by pain, expectoration, or any symptom of cold, coming on every evening at 9 o'clock, but at no other time, and ceasing on going to sleep; tickling cough, tickling being at one time in larynx, at another in chest, at another apparently at cardiac orifice of stomach, the mucus expectorated being grey roundish lumps, or yellow and tenacious, or watery, never at night; violent tickling cough from every contact with open air, with expectoration of

mucus. Under Lachesis difficult expectoration becomes loose, and there is spitting of blood.

Cobra has cough in the morning, with a taste of blood in mouth ; several fits of cough while warm in bed, with a peculiar sensation about fauces and larynx ; cough with wheezing ; short, tickling hoarse cough ; dry, hacking cough towards noon, caused by a constant troublesome tickling at top of throat, followed by hoarseness which increased towards night ; spitting of blood, which has no tendency to coagulate.

In connection with the action of these poisons on the respiratory function, it is important to note their action on the chest walls as enclosing the respiratory organs, and exerting by their expansion and contraction a mechanical control over that function.

Crotalus gives rise to soreness of chest with cough in evening ; a sharp sore pain and shooting in middle of chest, as if through the sternum, increased by pressure, not by deep breathing ; stitch in right side of chest accompanying a single violent sneezing and followed by pains in sternum ; dull stitch in front of chest as far as left shoulder ; stitch in right side close to sternum ; pain in right side under arm, then same in left ; throbbing bruized pain under right arm on ribs ; pain under left arm passing into left side of chest, much aggravated by deep breathing ; pain in left breast ; next day, pain in right ; oppression in chest on sitting down almost causing fainting ; great oppression of chest, with evident inflammation of lungs and bowels ; oppression of chest, and violent burning pain in trunk ; increased by touch.

Lachesis has also been reported to produce soreness in chest ; soreness as in violent catarrh, extending to between the shoulders, especially after eating, it produces throbbing in chest, as likewise in abdomen ; stitches through the chest, when coughing ; stitches through chest, from abdomen to shoulder ; stitches in left side, worse when coughing and even when breathing, with sticking pains in left knee ; needle like stitches in the left side and left hand ; pain when riding in a waggon ; pain extending inwards to the lower portion of the ribs ; pain in the short ribs, first in the right then in the left, then in the left elbow, then extending to the hand ; pains beneath the short ribs on breathing ; violent pains at night, with feeling of swelling of chest, so that he could not touch it ; tightness in the chest in the evening after lying down,

so much that she felt suffocated; burning in chest at night, with pain in the sternum; pressure upon chest as if full of wind, with sighing; dull heavy pressure in whole chest; pressing pain extending from chest to stomach; oppression of chest, suddenly disappearing: oppression during sleep; oppression with nightly attacks of vomiting; oppression alternating with clawing in arms; oppression with cold feet.

Cobra has not been reported to produce soreness of the chest; but it has produced most acute pain and sense of oppression at the chest, as though a hot iron had been run in and a hundred weight put on top of it, instantly relieved by hartshorn and water; heat and uneasiness in left chest, with aching pain, after a moderate walk, particularly felt below the middle of the left clavicle; dull heavy pain over left half of right chest, with stabbing on taking a deep inspiration, the attempt to take a deep breath causes a sudden short puffing cough, a real cough being impossible, from the stabbing pain, relieved by lying on the affected side, aggravated by lying on the opposite side; right chest quite easy, but aching sticking in the left chest much worse, on account of which he could not ride, and scarcely walk, had to press the left side with the hand, and bend towards that side; on attempting to walk fast, felt as if there was a broken rib tearing the lung; on attempting to breathe deeply, horrid lancinations in all directions through chest, with a short puffing cough; asthmatic constriction of chest, ending in mucous expectoration; uneasy aching about chest, particularly left side, always returning in the evening; pain shooting through from left shoulderblade to front of chest; distinct dull shooting in various localities in left chest; dull warm pricking in a great multitude of points over lower half of front of right chest, from fifth rib downwards; dull pain to right of sternum, behind third rib, with tenderness; tightness of chest across the upper part; tenderness over sternum.

In the light of the pathogenetic action on the respiratory apparatus abovedescribed, *Crotalus*, *Lachesis* and *Cobra* are likely to be serviceable in diseases of the larynx, trachea, bronchi, lungs, and pleuræ.

*Crotalus* and *Lachesis* would be useful in inflammatory affections of the larynx, acute and chronic; the differentiation between the two poisons being made by their general characteristics, as well

as by their specific actions on the larynx. Cobra would more likely be useful in nervous affections of the larynx.

Guided by Dr. Atchison's case, Dr. Hayward has used *Crotalus* with remarkable benefit in whooping cough; "especially when there is great debility, and much cardiac weakness, with blueness or pallor of countenance after an attack, and tardy return to the natural color; and when the attacks are followed by puffiness of the face, or hæmorrhagic spots, purple lips, blood shot eyes, epistaxis, or much frothy, stringy, sanguineous expectoration; and when there is any threatening of pulmonary œdema or paralysis."

*Lachesis* has been used with beneficial effect in whooping cough, when the cough is worse after sleep, when the cough without expectoration causes vomiting, or when the cough comes on with every contact with the open air, with mucous expectoration. So far as we have been able to ascertain, Cobra has not yet been used in this disease, though it has peculiarities in its cough which are calculated to make it useful.

*Crotalus* is likely to be useful in the first stage of inflammation of the trachea, of the bronchi, and of the lungs. The same cannot be said of *Lachesis*, far less of Cobra. "In pneumonia," says Dr. Farrington, "*Lachesis* may be useful, but not in the early stages of the disease. But it may be indicated in the later stages of the affection, when it assumes a typhoid form, especially when an abscess forms in the lungs."

We make no apology in giving in full the following cases by Dr. Hering which show the use of *Lachesis* in grave pulmonary affections:—

1. A woman of 76 years of age, who had long suffered from a suffocating cough, which prevented her lying down at night, and who had besides œdematous feet, etc., was for some time treated homœopathically with alleviation of the swelling of the feet and distention of the abdomen. She afterwards got *Ars.*, *Nux v.*, and *Ipec.* with temporary benefit. *Lach.* proved of the greatest efficacy in this case, and although from not being able to watch the case for a length of time, I cannot say whether that benefit was permanent, yet I shall detail the particulars of it.

The chest was, as it were, stuffed. She cannot lie down, from a sense of suffocation, and must open the doors and windows to obtain air; a suffocating, short cough with scanty and difficult

*expectoration* (characteristic of Lach.). She is frequently better and is then able to lie down, but the head must always be high, and she generally rests it on her hand.

Fever every night at ten o'clock, with urgent and unquenchable thirst, dryness in the throat and mouth, she can scarcely breathe for thirst, she must continually moisten the mouth; drinking does no good and she dreads it; apples alleviate it somewhat. The fever begins with rigor on going to bed, and the heat continues till about four in the morning, *with intervals of shivering*; there is sweat towards morning. Teasing pain in the temples during the hot stage, with burning heat in the epigastrium. So sleepy, day and night, that she cannot resist the inclination, but yet she cannot sleep, except a little towards morning. Frequent micturition, the urine is scanty, dark-brown, and turbid. Abdomen distended, much annoyance from flatulence; cannot bear anything on the abdomen. Little appetite, stool daily, frequent coryza.

Some weeks ago, another most annoying symptom appeared, which was very characteristic of Lach, and induced me to give this medicine, particularly as all the other symptoms were suited to Lach. It was this: the feeling of *a ball in the throat*, as if a button was stuck fast in the pit of the throat, not perceptible on swallowing food but perceptible on attempting deglutition, during which it seems to rise and sink, as if it were turned round. It always feels *as if she could bring it up, but it will not come* (characteristic of Lach). *She must have the whole neck bare*, cannot even endure the bed-clothes on it, nor even tie her cap strings on her throat. A short time before the appearance of these symptoms, she had a swelling between the collar-bone and first rib.

After taking Lach., the ball was much more perceptible, and seemed to threaten suffocation. On the morning of the third day 48 hours after the dose; some red blood was *hawked up* with much effort, a thing that had never happened to her before in her life. After this the ball in the throat disappeared; and she felt in every respect so much better as to consider herself quite cured; and I have never heard more about her.

2 A young man of phthisical habit of body, had suffered from pneumonia in autumn, and as happens in half the number of cases after severe depletion, he pined away, and came to me in spring

quite emaciated, and suffering from a constant cough. Sepia seemed to correspond with the symptoms, and it had so good an effect as to change the man's appearance altogether.

But the improvement went on only for three weeks after the first dose, and after the second dose, the complaint increased. This I always consider as an indication that a medicine does not answer, but that it is necessary to give some other medicine related to this one. Several other medicines, among the number, *Stan.*, relieved the accessory symptoms, but only brought the essential ones out in clearer relief—for example, *cough always after sleep*. This forced me on Lach. The symptoms were :

Short superficial tickling cough which is very exhausting, sometimes causing vomiting. Expectoration attended with much difficulty, and what is expectorated is of two kinds, thin tough mucus and thick roundish lumps. He often coughs, hawks and spits without bringing up anything. He coughs only during the day, (this day-cough is very characteristic of Lach., but also a night cough of which the patient is ignorant. They often appear together without the latter being observed.) More cough in the open air, and after speaking, which seems to make every thing dry. It is always worse in damp weather, and after eating fish. The cough often seems to originate in the epigastrium, where it produces a tickling sensation, and also severe pain. There is a pain as if from suppuration under the ribs, also in the trachea, and much water-brash. He is also always short of breath, especially after working with the arms. He has, especially after rising from the sitting posture, such a stiffness and weakness in the knees, that he can scarcely move from the place, he is always much bent as if from weakness. He has nausea and want of appetite in the forenoon.

After Lach. the cough was very bad for an hour, then he expectorated some yellow matter for the first and only time. After this the cough became looser, gentler, and less frequent. After three or four days the symptoms re-appeared, the colour of the countenance alone remaining improved.

After the second dose, improvement again occurred, and went on progressing for some time. After a few more doses, all his sufferings almost entirely disappeared, the hoarse phthisical voice was better, he walked upright and quick, and felt so strong and well, that he went on a journey of business.

We take the following cases by Dr. Bradshaw from the Annals of the British Homœopathic Society, Vol. I, pp. 298-9. Though very meagrely reported, they illustrate, so far as they go, the beneficial effects of these serpent poisons on diseases which were scarcely less severe and serious than tubercular phthisis, and which were pronounced incurable by their orthodox medical attendants.

1. N. B—, aged twenty, a fine young man, who had never been ill before in his life, got very wet, inflammation of lungs followed; during the year he expectorated very large quantities of pus and blood, and his medical attendant quite gave him up, and informed his friends there was not the slightest chance of his recovery. His father begged of me to visit him, as his son had an impression that I could cure him. I found a complete wreck. He was sadly emaciated; there was harassing cough; colliquative sweats, hectic fever, pulse 130, and all the appearance of a speedy termination of his sufferings. Auscultation rather gave hopes, as the vesicæ were distinctly defined, so that the case was rather one of pulmonary abscesses than true phthisis. Lachesis acted like a charm in allaying and soothing his cough. Carbo Vegetabilis, Phosphorus, Calcarea, Silicea, Hellebore, Arsenic, Naja, and Crotalus all were taken, with benefit, and he continued to gain flesh and strength. During his recovery he was nearly suffocated twice from two abscesses discharging themselves; still he continued to gain ground, and in a few months I gave a certificate for him to go to some light work. He went to work, got cold, over-exerted himself, and coughed up much blood, and some trouble-some pulmonary symptoms followed; but after about six months more of treatment he seemed again well, and I advised him to visit some relatives in Portsmouth. He wrote me that he had kept quite well, and had been carefully examined by two medical men for a Government appointment, and that he was able to take nearly any amount of physical exertion without inconvenience.

Naja, in this case, proved its power in removing cardiac uneasiness, which Lachesis did not seem to touch, and Crotalus helped to remove the accumulation of muco-purulent secretion out of the minute bronchial ramifications.

For this supposed case of phthisis pulmonalis, Cod-liver Oil

had been prescribed and taken in considerable quantities before I was sent for. In fact, his medical attendant had discontinued all other treatment, and had told him that it was the only thing likely to do him good. I immediately discontinued it, as it disagreed with him and took away his appetite. I have seen many cases where Cod-liver Oil has been ordered much to the detriment of the patient.

2. A B—, aged thirty-five, married. He is a clerk in a warehouse, has always been delicate, and nearly died three years ago of inflammation of the lungs and windpipe; at which time he quite lost his voice. Subsequently, however, he somewhat recovered his strength, but there remained a husky cough, with bloody, purulent expectoration. His medical attendant having told his wife her husband must die, he thought he would try homoeopathy. The upper lobes of the lungs did not act satisfactorily; there was much hoarseness of voice, nearly approaching aphonia, constant cough; expectoration mucous-stercoral; the pulse was wiry, there were colligative sweats. The cartilages of the larynx were very sensitive on pressure; there was much dyspnoea on slight exertion, he was losing strength and weight. I made him remove to a dwelling just outside the town, and after about eight months of treatment he was able to resume his work and walk backwards and forwards about six miles a day. Naja, in this case, was of very great service in relieving his irritable cough and seemed to promote nice and easy expectoration. I have had four cases similar, which terminated fatally.

## EDITOR'S NOTES.

### HAHNEMANN'S COMPLAINT AGAINST GRATUITOUS ADVICE-SEEKING

IN Dr. Bernhard Schuchardt's collection of Hahnemann's Letters to a Patient is found the following letter dated Altona, Nov. 9, 1799, which he caused to be inserted twice in the *Reichsanzeiger* (Imperial Advertiser). The letter shows his sense of justice as well as his humanity.

"Dear Public! It will scarcely be credited that there are people who seem to think that I am merely a private gentleman with plenty of time on my hands, whom they may pester with letters, many of which have not the postage paid, and are consequently a tax on my

purse, containing requests for professional advice, to comply with which would demand much mental labour and occupy precious time, while it never occurs to these inconsiderate correspondents to send any remuneration for the time and trouble I would have to expend on answers by which they would benefit. In consequence of the ever-increasing importunity of these persons I am compelled to announce:—

"1. That henceforward I shall refuse to take in any letters which are not post paid, let them come from whom they may

"2 That after reading through even paid letters from distant patients and others seeking advice, I will send them back unless they are accompanied by a sufficient fee (at least a Friedrich's d'Or) in a cheque or in actual money, unless the poverty of the writer is so great that I could not withhold my advice without sinning against humanity."

#### TATE'S HAHNEMANN HOSPITAL OF LIVERPOOL.

Mr. Henry Tate of Liverpool has made a magnificent gift of a noble building furnished and completely equipped to his adopted city for a homœopathic hospital. Though a firm believer in Homœopathy, he has, nevertheless, with an enlightened appreciation of human progress, left the future medical officers of the Institution unfettered as to the mode of practice they may think necessary to adopt.

"The administration of the hospital," he has said, "will be started on the principle laid down by Hahnemann as at present understood, and the medical staff will be chosen from the ranks of its professors. But while holding strong, and, as I conceive, well-founded, opinions as to the general soundness of those principles, and while feeling convinced that they are the best yet discovered, I have no desire to fetter posterity and tie it down to a strict adherence to what appear to me the great medical truths of to-day. I have therefore provided in the trust that although this institution will bear the venerated name of Hahnemann, and will thus be unequivocally associated with the system he propounded, there shall be no restriction on the managers of the future to the present practice. The medical officers shall ever be free to adopt such measures as future scientific research may discover and develop; and if in the march of progress it should come to pass that the Hahnemann system should be superseded by something else—which I, of course, at present find it difficult to believe—then I hope the managers of this institution will show themselves worthy of the free and open spirit which has witnessed its foundation, and be ready to apply the newest discoveries which the science of their day may bring to light."

## PREPARATION AND PROPERTIES OF ANTIFEBRIN.

The following account of Antifebrin is given by the Paris Correspondent of the *British Medical Journal* for Dec. 11, 1886.—

"Antifebrin is prepared by heating aniline with crystallisable acetic acid in a special receptacle; it is distilled and purified by successive crystallisations. It takes the form of a white crystalline powder, having no odour, and a slightly sharp taste, it is almost insoluble in cold water, easily soluble in warm water, and especially so in alcohol and liquids. It melts at  $113^{\circ}$  C., and distils at  $202^{\circ}$  C., without decomposition. It is neutral, and resists most reagents. The action of antifebrin is four times more powerful than that of antipyrin. Many observers have tested its effect in cases of typhoid fever, erysipelas, acute muscular rheumatism, phthisis, lung abscesses, fevers (leukæmia, pyæmia, septicæmia), and pneumonia. Antifebrin has been administered in doses of 25 grammes to 1 gramme in brandy, wine, or wrapped in wafer paper. A dose of 2 grammes has never been exceeded by Calm and S. Hepp, who are studying this drug, but it can be increased without inconvenience, according to the nature, acuteness, and length of the complaint, and also according to certain conditions. The action of this substance manifests itself at the end of an hour, attains its maximum after four hours, and ceases, according to the dose, in the space of from three to ten hours. Antifebrin lowers the febrile temperature without exercising any influence on the normal temperature, and, according to various authorities, it has none of the disadvantages which attend the use of various antipyretics. It causes redness of the face, and profuse perspiration. No shivering has been observed in consequence of increased doses, though in some cases, as with antipyrin, patients have experienced a sensation of cold. Together with the fall in temperature there is a noticeable diminution in the beating of the pulse, accompanied by increase of arterial tension, as shown by sphygmographic tracings. In a few cases patients have complained of excessive thirst, and diuresis has been considerably increased (2,500 to 5,500 cubic centimetres). In cases of muscular rheumatism, antifebrin has lessened pain and fever very rapidly. The only untoward symptom which occurred when antifebrin was first administered was cyanosis of the face and extremities, which occurred in some patients, this, however, gradually disappeared, and left no cause for anxiety."

## CLINICAL RECORD.

*A Case of Cholera*

Reported by Babu Jadunath Mukerjee

Patient, a healthy Hindu lady of 55 years, began to have diarrhoeic motions since 3 A.M., 18th March 1887. Had six stools up to 7 A.M. when I was called to see her. Gave 5 drops of Spirits of Camphor at 8 A.M., which she could not retain. No urine with stool since morning. Saw patient again about 10 A.M. and found her somewhat weak, with cramps in the extremities. Stools watery and mixed with flocculi, repeated Camph 3 drops 11½ A.M. Had another watery, profuse and flocculent stool since last report but quite painless, pulse still weaker, ordered Jatropha 6

2 P.M. Had slept a little after the 1st dose of Jatropha, no more stool, but cramps in the hands and legs continue. R p Jatropha

3-30 P.M. Had another stool just now of the same character but less watery; pulse getting weaker and slower than before. Rep med

5 P.M. Pulse better. Skin warmer, patient complains of a sensation of internal heat with thirst and restlessness. Stop med.

5-45 P.M. Had another stool about this time which was thin, watery, and mixed with white albuminous flakes, and about a poah in quantity, with a feeling of exhaustion after the stool but quite painless as before. Ricinus 6. Soon after this Dr. Seneu was called in. He examined her carefully and advised me to continue the same medicine.

9 P.M. No stool since the dose of Ricinus, no med. 10 P.M. Another stool thicker and scantier. Rep med.

3 A.M. another stool, character and quantity same. No med.

19th March. 6 A.M. Patient doing well, no stool since last report, no sign of micturition yet, temperature 97°, skin somewhat colder than natural. Ordered Barley water, no med.

9 A.M. No secretion of urine yet, bowels still confined but not puffy. Cont. Barley water, no med.

12 M. Some uneasiness probably from increase of atmospheric temperature, no desire to make water, no stool. No med.

2 P.M. Skin warmer, but temperature 97°, tip of the nose rather cold. No med., cont. Barley water.

6½ P.M. Had a thin yellowish stool at 4½ P.M. with a few drops of urine, but felt quite exhausted after, and the skin being cold and perspiring, I ordered China 6.

11 P.M. Had another stool about this time about a poah in quantity,

darkish yellow, pulse small and feeble as before, evident sinking of the voice, no urine with stool Chin 30

2 A.M. Another stool of the same character and quantity but no urine. Rep. med. 5 A.M. Found patient sleeping quietly.

29th March 7 A.M. Another stool, profuse but feculent, painless, gushing, followed by exhaustion, some urine with stool Podo 6

11½ A.M. No stool nor urine since last report. Had taken a little sago water in the morning after which she felt fulness and puffiness of stomach, and a burning all over the body with pain in loins and extremities. Dr. Sagar called and, finding the head hotter than natural, ordered Bell 30, with cold application to the head.

12 M. Another stool about this time, greenish yellow, fecal and mixed with mucus, passed a few drops of urine. Rep. med.

2 P.M. Temp 97.4 no more stool or urine, loud rumbling in the abdomen, yet no ptyines, desire for food. Ordered sago.

6 P.M. Another stool, small in quantity and thicker and full of greenish mucus, passed urine. Rep. med.

10½ P.M. Pulse fuller and quicker, skin warmer than natural, no med.

21st March. 8 A.M. A stool just now after an interval of 14 hours, with urine, consisting of more fecal matter than mucus, desire for more substantial food. Had slept pretty well at night. Sago and milk.

12 M. Dr. Sagar called, and finding her somewhat drowsy with heat of the head, ordered another dose of Bell 30. Temp 98.4.

9 P.M. Drowsy the whole day, heat of skin, speech thick, no urine since morning. Dr. Sagar ordered Opium 6.

12 P.M. Sleeping heavily with deep sonorous breathing, pulse fair, skin moist but not cold, no urine or stool up to time. Rep. med.

1 A.M. Drowsiness, no stool nor urine, pulse fair, rumbling in bowels. No med. 5½ A.M. A scant stool just now, with profuse urination, followed by some richer stool more fecal than mucus. No med.

6½ A.M. Temp 98.4, speech more distinct, pulse fair, heat of head continues as before, but not so drowsy now, pain in the right hypochondrium with gripes in the stomach, desire for more stool. Nuxv 6 gles.

12 noon. Temp 97.6, Resp. 26, Pulse 90, tongue red, smooth and glazed, drowsy again, hiccup from time to time. No med.

4 P.M. Drowsiness on the increase, pulse weaker. Opium 6.

6 P.M. Skin felt warmer apparently, but temp 97° only. No med.

9 P.M. Breathing sighing, drowsy and wakeful in alternation, tympanitic distension of bowels, pulse feverish, much thirst for large quantities of water, prostration with sinking feeling. No med.

11 P.M. Made water just now with emission of flatus only but no

stool, heavy breathing with drowsiness continues as before. Arg. nit. 6.

12 Midnight. Dozing quietly without any complaint, pulse pretty full and quicker, no more stool nor urine. No med.

23rd. 6 A.M. Abdomen sensitive on pressure, deep sighing breathing less frequent. Temp. 97; tongue red. Sago and Gandal soup; no med.

9½ A.M. Dr. Sircar called and, observing the following symptoms,—gripping in bowels, puffiness and sensitiveness over the rt. hypochondrium, desire for stool, and drowsiness, prescribed Opium 30.

½ P.M. Not so drowsy as before, skin cool, pulse soft but regular, breathing at times moaning, heat of head quite natural, abdomen still tympanitic and sensitive. Rep med.

2½ P.M. Within 2 hours after repeating the medicine she had a stool with profuse urination with relief of all abdominal symptoms, stool faecal and healthy looking. Temp. 97.8. No med.

4 P.M. No fever, skin cool and moist, no pain in the abdomen, drowsiness almost gone, complains of general weakness only. No med.

9 P.M. Drowsy again, skin moist, respiration natural. Rep. Op. 30.

24th. 7 A.M. Passed the night pretty well, made water freely early this morning, no stool, abdomen soft, complains of thirst and prostration only, drowsy at times. Diet: Milk and sago, Mug soup. No med.

12 M. A healthy motion just now with free urine. No med.

1½ P.M. Dr. Sircar called and, finding patient better, discontinued medicine, and ordered milk diet.

25th Morning. Passed the night quietly; appetite pretty good. Ordered rice with Gandal Soup. Sulph. 30 gles one dose.

26th Feeling much better, some weakness only. Sulph. 30 one dose. Diet same.

27th Getting on nicely, no more drowsiness, urine free; ordered rice and Mug soup. No med.

#### Remarks.

This case, though apparently not very serious, gave us no end of trouble and anxiety. It is cases like these which require the utmost care in prescribing. The Spirits of Camphor prescribed in the beginning did no good, but the other medicines prescribed subsequently met the indications satisfactorily, especially *Jatropha*, *Ricinus*, *China*, *Belladonna*, and *Opium*. The delayed convalescence was due partly to the injurious effects of emanations from a dirty open sewer, situated immediately to the north of the room, in which the patient was obliged to remain throughout the whole course of her disease.

**THERAPEUTICS OF CONSTIPATION, DIARRHŒA,  
DYSENTERY, AND CHOLERA.**

**88. EUPHORBIA AMYGDALOIDES.**

**Constipation :**

1. Difficult st., from painful spasm of the anus, which continued during and after the evacuation.
2. Small, lumpy st., with prolapsus, without straining.

**Diarrhœa :**

1. Offensive D., preceded by considerable griping, first in upper then in lower abdomen, followed by slight prolapsus.
2. Feeling of action of the liver, followed by griping and offensive flatus, then offensive D., after which the feeling of the liver passes off, followed by slight prolapsus.
3. Offensive D., preceded by uneasiness in abdomen, followed by slight prolapsus.
4. Very offensive D., of dark liver color, preceded by some uneasiness in the abdomen, but no prolapsus.
5. D., with or without prolapsus.
6. If D. lasts external piles appear, not returning with the prolapsus.

**Dysentery :**

1. Fæces small, lumpy, slimy.
2. At uncertain periods, he had an inclination to D., as though coming on rather suddenly, with a sympathetic sick feeling, and increased saliva; at times, also a peculiar seething sensation in region of spine; sometimes from occiput to loins; sometimes this goes off without D., but rarely; usually it is followed by dark-brown, watery, mucous discharges, sometimes mixed with solid fæces, sometimes offensive, sometimes with blood, mostly in the afternoon, sometimes more or less griping before st.

**Before St :**

1. Griping in the abdomen.
2. Feeling of action of the liver.
3. Discharge of offensive flatus.
4. Uneasiness of the abdomen.
5. Sympathetic sick feeling and increase of saliva.
6. Seething sensation in the region of the spine.

**During St :**

1. Painful spasm in the anus.
2. Prolapsus ani.

**After St :**

1. Painful spasm in the anus.
2. Prolapsus.

**Rectum and Anus :**

1. Painful spasms.
2. Prolapsus.
3. External piles.

**General Symptoms :**

1. Out of humour with everything from 6 to 10 p. m., passing off after a few mouthfuls of supper.
2. A strong odor of mice in the nose.
3. Increased saliva.
4. Warm peppery feeling in the pharynx and anterior mediastinum, followed by warmth of the stomach radiating through the chest ; it passed off, ending with feeling as if the liver were excited, which proceeded to a sensation as if the bowels were about to act, like that which is often felt after breakfast, a meal which he had not taken.
5. Poor appetite.
6. Qualmishness removed by supper ; qualmishness when moving about indoors, relieved by sitting still ; when writing it recurred, relieved by eating a plum.
7. Stitches in the liver.
8. Tightness of the region of the spleen ; stitches in the region of the spleen, when rising from sitting, followed by some feeling of uneasiness.
9. Sensation as if a long worm were writhing in the region of the transverse colon or transverse duodenum (he had felt this before when proving Calad. S.)
10. Urine hot during micturition especially in the forenoon ; considerable increase of urine.
11. General feeling of malaise.
12. Felt tired when walking, though he could bear a great deal of exercise.
13. Great restlessness all night, tossing about half awake and half asleep.

**Remarks :** *Euphorbia amygdaloides* is likely to be a valuable remedy in constipation, diarrhoea and dysentery. In constipation when the passage of stool is difficult from painful spasms of the anus, and the stools are scanty and lumpy ; in diarrhoea when the stools are offensive, of dark liver color, and are followed by prolapsus ; in dysentery when the stools are dark brown, watery mucous discharges, sometimes mixed with solid faeces, sometimes with blood, and occur chiefly in the afternoon. The offensive character of the diarrhoeaic, and dysenteric stools, and the prolapsus with almost every stool whether hard, diarrhoeaic or dysenteric, are characteristics of the drug.

**89. EUPHORBIA COROLLATA.****Diarrhoea :**

1. Sts., light-yellow, watery, painless ; expelled forcibly. (Bell)

**Cholera :**

1. Suddenly, with no premonitory symptoms of pain, a distressing sense of deathly nausea set in, accompanied in a few minutes by faintness ; then sudden and powerful vomiting of, first food, &c., in stomach, then large quantities of water mixed with mucus, then clear fluid like rice-water.

In less than a minute after vomiting began, great commotion in bowels, followed immediately by copious watery evacuations, set in ; this simultaneous vomiting and diarrhœa continued, at short intervals, accompanied by great anxiety, a death like sense of faintness and exhaustion.

2. Inflammation of the mucous coat of the stomach and bowels, with hypercatharsis.

**General Symptoms :**

1. Great anxiety.
2. Sudden deathly nausea accompanied by faintness.
3. Sudden and powerful vomiting of, first the food, &c., in the stomach, then large quantities of water mixed with mucus, then clear fluid like rice-water.
4. Distressing nausea and prostration.
5. Pulse slow and soft.
6. Languor ; great weakness.
7. Death like sense of faintness and exhaustion ; resembled more nearly a severe attack of sea-sickness or cholera.
8. Painful spasms in the intestines (Bell).
9. Cramps in the feet and hands (Bell).
10. Warm sweat on forehead, followed by general coldness of the surface, with cold sweat on body and limbs (Bell).
11. Cool skin covered with beaded sweat.
12. Cold hands, feet, and nose.
13. Perspiration.

**Remarks:** *Euphorbia Corollata* deserves a trial in cholera and choleraic diarrhœa. One case of cholera was reported to us sometime ago as having been cured by the drug, after failure of other drugs. The vomit is rice-water, though the stools are simply described as copious and watery. Whether further provings would have developed rice-water stools is more than can be safely affirmed. We must remember that it is not every case of cholera that has both rice-water vomit and stool. And therefore in the dearth of genuine cholera-remedies the practitioner should do well to remember *Euphorbia Cor.*

## 90. EUPHORBIIUM.

**Constipation :**

1. Constipation. Hard, difficult st.
2. Thin st., after pressure ; at last three hard lumps without difficulty.
3. Soft st., scanty, mixed with small lumps, delayed.

**Diarrhœa :**

1. D. several times a day, with burning in anus, distension of abdomen and pain as from internal soreness.
2. Profuse D. preceded by itching in anus, with urging.
3. Profuse D. with vomiting.
4. Pasty st. and yellowish.
5. Clayey st. preceded by itching in rectum, with urging.

6. Griping, then a thin st. with burning itching about rectum.

**Dysentery :**

1. Loose, large st. with tenesmus and sore feeling, as if dysentery were coming on.
2. Fatal dysentery.

**Cholera :**

1. St. at first natural, then fermented and watery.

**Before St :**

1. Itching with urging.
2. Tenesmus and sore feeling.
3. Griping.

**During St :**

1. Burning itching about rectum.

**Rectum and Anus :**

1. Burning sore pain about rectum.
2. Burning in anus.
3. Itching in anus.
4. Tenesmus.

**General Symptoms :**

1. Relaxed and tired in the whole body: Quiet, though with inclination to work.
2. Faintness ; anxiety as if he had taken poison.
3. Tongue covered with a thick mucus ; flat taste, after breakfast, with white coating.
4. Coated tongue and almost all the concomitants of nervous erethism.
5. Inability to speak intelligibly.
6. Salivation ; with salt taste on left side of tongue ; with nausea and shivering.
7. Taste bitter ; foul ; as if mouth were covered with rancid fat.
8. Burning in the throat extending to stomach, with mucus in mouth ; with trembling, anxiety and heat in upper part of body ; nausea, flow of water from mouth and dryness of cheeks ; as if a flame streamed out of it, with necessity to open the mouth.
9. Dry sensation in the mouth without thirst.
10. Thirst for cold drinks.
11. Incessant eructations ; empty.
12. Spasmodic contractions of stomach with empty eructations.
13. Hiccough frequent.
14. Nausea ; nausea with shuddering.
15. Vomiting ; incessant of watery fluid ; with diarrhœa.
16. Griping in the stomach as if it would be compressed, then salivation and nausea, griping in the left side with clawing, the constriction of cardiac orifice, with salt salivation and shuddering in the skin.
17. Bruised pain in the stomach on touch.
18. Constriction from all sides of the stomach towards the middle, with salivation and nausea.

19. Burning in the stomach : in pit after eating, with pressure.
20. Rumbling in abdomen ; emission of flatus ; tympanites.
21. Flatulent colic, better from resting head upon elbows and knees, after which flatus was emitted.
22. Strangury.
23. Pain in the left kidney, with burning in all urinary organs.
24. Cramp of metatarsus drawing the toes together.
25. Cramp like pain in foot, worse towards external malleolus, when sitting and standing, better when walking.
26. Erysipelatous swelling of cheek and vesicles filled with yellow fluids.
27. Gangrene.
28. Irrasistible sleepiness during the day.
29. Anxious confused dreams without end.
30. Chilliness with sweat ; with sensation as if he had not slept all night and were completely washed out, and with disappearance of veins of hands.
31. Cold hands with heat in face and forehead, without thirst.
32. Cold sweat ; on legs in morning.

**Remarks :** It is not certain whether the Euphorbium of commerce is a uniform product, being the produce of only one species, the *Euphorbia officinarum*. According to Hahnemann, "formerly it was obtained from the *Euphorbia officinarum*, which grows in the hot regions of Africa ; at the present time we gather it from the *Euphorbia Canariensis* upon the Canary islands. \* \* There are many varieties of Euphorbium, the medicinal virtues of which appear to be pretty much alike." According to Dr. Hamilton (*Flora Homœopathica*) the concrete juice imported into Europe, and sold as Euphorbium officinalis, is the produce of several species, but more particularly of the *Euphorbium Canariensis* ; others, as the *Euphorbia Esula* and *E. Lathyris*, are quite as violent in their effects." The "pretty much alike," and "quite as violent in their effects," can only refer to the violent effects which may be common to all the species, but we cannot be certain from them that the finer physiological actions are similar, on the contrary, our experience with other drugs forces us to believe that these may be quite different, leading to different therapeutic uses. Hence it is absolutely necessary that homœopathic chemists should be particular as to the particular kind of resin they use as Euphorbium. They should stick to the resin from the *Euphorbia officinarum* whether from Africa or the Canary islands.

**Euphorbium** is likely to be useful in constipation, when hard lumps are passed after thin stool, also in diarrhoea when the stools are profuse, or pasty and yellowish, or clayey, with itching or burning itching before and during stool ; and in dysentery when the other symptoms correspond.

## . 91. EUPHRASIA.

### Constipation :

1. St., hard and scanty ; and at an unusual time.

2. St., hard and sluggish ; hard and difficult.
3. St., hard, nodular, unsatisfactory, delayed, followed by itching in anus.
4. St., hard at first, then pasty.
5. St., scanty ; delayed ; profuse and formed.

**Diarrhoea :**

1. Pasty in the evening, after a nodular one in the morning.
2. Pasty, thick, delayed, preceded by flatulence, with urging, followed by burning in anus.
3. D., three times in a day.

**Before St :**

1. Flatulence with urging.

**After St :**

1. Burning in anus.
2. Itching in anus.
3. Sticking in hæmorrhoids with burning.

**Rectum and Anus :**

1. Swollen and tense hæmorrhoids.
2. Sticking in hæmorrhoids after st., with burning.
3. Pain in hæmorrhoids, burning in hæmorrhoids, also better from cold sitz bath.
4. Itching in hæmorrhoids ; the itching becomes boring sticking.
5. Pressure when sitting in anus.
6. Painful crawling in anus.

**General Symptoms :**

1. Weariness, as after fasting
2. Irritable Reflective and disinclined to speak.
3. Redness and heat of the face and of cheeks. Pallor.
4. Profuse bleeding of gum.
5. Tongue thickly coated in the morning, with earthy taste.
6. Taste clayey, insipid unnatural taste of food. Bitter taste of tobacco-smoke in the morning.
7. Dry mouth.
8. Appetite lost. No relish for cigars.
9. Eructations tasting of food.
10. Hiccough. Nausea immediately, also from tobacco-smoke, with griping in the abdomen. Nausea better from a glass of water.
11. Distension of abdomen, as without flatulence.
12. Griping and rumbling better from emission of flatus. Griping in the umbilical region. Griping with nausea and then rumbling in abdomen.
13. Frequent micturition ; with profuse, pale urine.
14. Palpitation.
15. Cramp like pain in the back, wrists, metacarpus, and fingers.
16. Cramp like pain in calf on long standing.
17. Frequent waking as from fright.
18. Cold skin ; cold hands, with flushes of heat and red face, without thirst.
19. Sweat at night in sleep, better from waking.

THE LIGHT WHICH HOMŒOPATHY MAY THROW  
UPON ETIOLOGY OR THE CAUSATION  
OF DISEASE.

The importance of etiology or of a knowledge of the causes of diseases cannot be overrated. So great is this importance that it has passed into proverb that a knowledge of the cause of a disease is half its cure. Removal of the cause, or, when the cause is irremovable, removal from the cause, generally leads without any other treatment to removal of the effect—disease, at least, must be one of the steps, if not the first step, towards removal of the effect.

A consideration of the etiology of disease reveals the following facts :—

(1.) Diseases are produced by mechanical causes. The very first effect of a mechanical cause must be of a mechanical character in the shape of solution of continuity, external or internal, such as rupture or fracture. But as this effect takes place in a living organism, vital disturbance must immediately ensue, and lead to disease.

(2.) Diseases are produced by chemical agents. A similar remark to that made under the first head may be made under this head. Originally of a chemical nature, such as definite combinations of the cause with the chemical components of the tissues, the chemical lesions, besides producing solution of continuity by destruction of tissue, give rise to disturbance of vitality or disease, more rapidly even than mechanical lesions, owing to the facility which chemical agents have of entering the circulating current, and of spreading from part to part.

(3.) Diseases are produced by the action of imponderables such as light, heat, electricity, and magnetism. These agents produce disease directly by interfering with the vital and chemical processes that are going on in the organism. Their action is of a profound character, and often eludes observation. In fact the action of these agents has hardly been studied by the physician. Perhaps an exception may be made in the case of heat, but the morbid actions of even this universally felt agent have not been investigated with any degree of scientific precision. Considering the universality of these agents, their presence or

development in every operation without or within the economy, we may well understand how powerful and pervading their influence must be upon that economy, and how their excess or deficiency may disturb the equilibrium of its various parts.

(4.) Diseases are produced by the development of inferior organisms in the interior or exterior of the organism. The germs of the inferior organisms are introduced into the system either from the air that we breathe, the fluids that we drink and bathe in, or the food that we eat. Or the organisms themselves may migrate from the soil or from other animals. In no case have they been found to be generated in the system itself, except from germs coming from such external sources. This part of etiology, though not strictly modern, has received much light from modern research. Many diseases, which were puzzles before, have now their causes traced, and their prognosis and treatment better understood by the light thus received.

(5.) Diseases are produced by the influence (attractive or otherwise disturbing) of cosmical bodies. That cosmic bodies exert a morbid influence upon the human constitution is an old belief, as old almost as man himself. But the fact underlying the belief had become so absurdly exaggerated, and mixed up with such incredible superstitions, that it had ceased to be believed in altogether by the learned, in fact, up to the present day it is considered a merit to reject it as a relic of human credulity and hasty induction. Nevertheless the fact is a fact, and sober minds are at least agreed so far as not to reject it without examination. And in spite of the risk of ridicule coming upon them, there are to be found physicians who believe that cosmical bodies do exert a morbid influence upon the human constitution, though not to the extent held by astrologers of old. And what wonder that they should do so. We know they all exert an attractive influence upon everything in our earth, and chiefly upon fluids. Very recently the planets, and especially the large ones, when near one another, have been found to exert an influence over the sun-spots themselves, and the sun-spots have been found to exert a variety of influences upon the earth, chiefly of an electric and magnetic character. Where is the absurdity to think that the planets and the sun may exert some influence, direct or indirect, upon the body of man which is a part and

parcel of the earth, and which is subject to be disturbed by disturbances in the various conditions of the earth? This part of etiology has to be constructed. The work must be laborious, but is well worth any amount of labor that may be bestowed upon it.

(6.) Diseases are produced by the excessive use of some organ or organs, leading to loss of energy. Numerous instances may be cited of disease produced in this way. As illustration we may just mention the eye, the brain, and the locomotive system as the organs which suffer most from over-work.

(7.) Diseases are produced by hereditary transmission. There is scarcely an anatomical or a physiological peculiarity which is not transmissible from parent to offspring even into many generations. And diseases, as abnormal conditions, or modifications of normal anatomy and physiology, are no exceptions to this law. With respect to some diseases, this transmission is too patent to be overlooked. These are syphilis, tuberculosis, scrofulosis, insanity, cancer, &c. There are others which are not observed to be so transmitted. And in respect of notoriously transmissible diseases, it is to be noted that their transmission is sometimes interrupted. These facts show that there are other laws which govern the development of the embryo in utero, than the law of hereditary transmission. Holding to this last, the cardinal law, the deviations, the modifications and the apparent suspensions thereof, may be traced to their own distinct causes, and thus the other laws may be discovered. The whole subject is worthy the most careful attention of the physician, not only with a view to elucidate the causes of disease, but also to throw light on the darwinian hypothesis.

(8.) Diseases are produced by contagion and infection. So far as cases of diseases produced by contagion and infection have been searchingly examined, it has been found that their production has been due to growth and multiplication of the disease-germs of one patient in the blood or tissues of another transmitted by actual contact, or through some intervening medium as the air, or bed-clothes, &c. These diseases, at least, the great majority of them, come under the fourth head.

(9.) Diseases are produced by causes which cannot be traced to either of the preceding sources.

It must have been evident from what has been said above that the discovery of the cause or causes of a disease is not so easy as is ordinarily imagined. The offhand manner in which practitioners attribute diseases to this or that cause, betrays either their profound ignorance or their impatience, and it cannot be too strongly condemned. In spite, however, of all the attention that can possibly be bestowed upon a case, and in spite of all the knowledge that can be brought to bear upon it, the physician may fail to discover the true cause. The difficulty may be due to the multiplicity of causes that are in operation, and which we have attempted to generalise under the preceding heads; or it may be due to the fact of the actions of some of them being ill-understood and ill-defined.

But assuming that all the difficulties have been overcome, there will still remain a residuum which will fall under the last head. In these cases, our obvious duty is to endeavour to discover if there are other causes of disease than those already enumerated. But how is this to be done? We can only proceed from the known to the unknown. Are there any positive data to help us in the difficulty? We think there are, and they are to be found in cases of poisoning. Toxicology is properly speaking a branch of pathology. The phenomena of poisoning are no other than symptoms of disease. "There exists," says Claude Bernard, "so remarkable an analogy between the symptoms of legitimate diseases, and the disorders from the introduction of toxic agents into the economy, that the effects of poisons may, up to a certain point, be considered as the most perfect specimen of morbid actions, which can possibly be selected as a type."

Toxicology is the first necessity, the very foundation of homœopathy. Homœopathy, in fact, may be said to be applied toxicology. And consequently toxicology has, under the guidance of homœopathy, received an extraordinary, though properly speaking, no other than its legitimate, development. Before the advent of homœopathy toxicology was only the science of accidental and violent poisonings. Since that advent voluntary and slow poisoning has been included within its domain. The provings of homœopathy are no other than slow, voluntary poisonings, with a view to elicit all the possible health-disturbing actions of substances which, though not all of them violent poisons in the

ordinary sense of the term, are true poisons in the sense of deranging health.

Homœopathy has, by instituting systematic provings, revealed the following general facts :—

(1.) Material substances, derived from the mineral, the vegetable, and the animal kingdoms, are capable of producing diseased conditions in the healthy organism, when introduced into it either by absorption through the mucous membrane and the skin, or by injection into the tissues.

(2.) Such substances are capable of curing similar diseased conditions existing in the organism, when not produced by the self-same substances.

(3.) The therapeutic effects, and sometimes the physiological or pathogenetic effects are capable of being produced by quantities of those substances, not infinitesimal indeed, but well-nigh so compared with appreciable quantities.

(4.) That one substance may be the physiological antidote of another substance, when it is capable of producing similar abnormal conditions in the organism, the antidotic power being in proportion to the closeness of their pathogenetic effects.

A long list of substances has now been given to the world, with the pictures of their health-disturbing actions minutely and faithfully drawn. And other similar substances are in course of discovery. In reputed cases of poisoning, from symptoms alone without the aid of chemical and other evidence, we may, in some cases certainly, in others approximately, trace the effects to their causes. In cases of disease which cannot be traced to the causes which are ordinarily known to be productive of morbid conditions, why may we not avail ourselves of the light of homœopathy? The human organism, as indeed every animal organism, is acted upon by every substance in a fixed and definite manner. Only the complexity of its structure and the multiplicity of substances which enter into its composition, necessitating complexity in the actions themselves, may mask their appearance, and render their recognition difficult. Hence the apparent anomaly of the same organic phenomenon being produced by different causes. But the anomaly has vanished whenever it has been subjected to a close scrutiny. So that there is no longer any doubt of the fixed and definite nature of

the action of each distinct substance upon the human organism. And to attempt to argue from the action to the agent would be perfectly legitimate and scientific. Of course we would deprecate all hasty conclusions. All that the facts revealed by homœopathy can do is to put the inquirer on the right track. He will be enabled to suspect the presence of certain substances with the pathogenetic symptoms of which, the symptoms of a case or cases of disease are found to agree. He will not be justified in asserting positively without further evidence that a case of disease, or an endemic, or an epidemic, is actually due to the deleterious action of a particular substance, or a combination of substances, until he has actually proved its presence in the soil, or in the food, or in the water, or in the air.

The line of inquiry here suggested will, if pursued with all the caution necessary for the discovery of truth, lead ultimately to the clearance of the whole subject of etiology. Though we have generalised under distinct heads all the possible causes of disease, it is not to be understood that the perturbative influences of the various agents that come under those heads have been ascertained in all their detail. Far from this, the operations of a large number of them upon the human economy are yet undetermined, and even the reputed operations of most of them rest on doubtful grounds. The whole subject therefore requires a thorough revision, and this cannot be effected better than under the guidance of facts brought to light by Homœopathy. For what better light can we possibly have in conducting an inquiry into the causes of diseases or morbid conditions of the system than the positive knowledge, derived from actual experiments, of definite morbigenic actions of known substances? It is in this way that a known substance may be ascertained to be the real cause of a disease where its very presence was not suspected, and where other causes were only imagined. And it is in this way that a process of elimination would be set up, whereby new causes may be discovered, and the actions of known ones more clearly defined. This is not a new process in science. It is by such a process that the existence of new substances have been demonstrated in the earth, and of known substances suspected in the sun, stars and nebulae. What the lines in the spectrum are to the physicist, the symptoms of disease are to the physician.

## Cleanings from Contemporary Literature.

### ON THE TRANSLATIONS OF HAHNEMANN'S PATHOGENESIES; WITH A PLEA FOR A NEW ENGLISH VERSION.

By Dr. RICHARD HUGHES.

WHEN Hahnemann first (in 1805) issued a collection of provings, he clothed it—as its name *Fragmenta de viribus medicamentorum positivis* indicates—in a Latin dress. It thus became the property of every educated physician throughout the world, and needed no translation. But when (in 1811) he began to re-issue these provings in a more enlarged form, he saw good to depart from his former practice. From this time forward all his pathogenesies were published in the German tongue: we have them as the *Reine Arzneimittellehre* and the *Chronische Krankheiten*.

Consequently, as his method came to be practised in other countries, it became necessary to render the pathogenetic materials he had furnished into the vernacular of each. This has been done in France, America (for the English-speaking peoples), Spain, and Russia. Of the two latter versions I can say nothing; nor have they any direct interest for the readers of this paper. But an estimate of our English translation, with a view to inquiry whether we should be content with it, or should endeavour to compass another, is a matter of considerable importance. And, as most of us read French, it is worth knowing what sort of reproduction of the Hahnemannian pathogenesies we have extant in that language.

1. But, before I speak of the French and English versions, I must say something about a work very little known, viz., a rendering of part of the *Reine Arzneimittellehre* into Latin. In 1826 there appeared at Dresden a volume having on its title-page—

“*Samuelis Hahnemannii Materia Medica Pura, sive doctrina de medicamentorum viribus in corpore humano sano observatis, e Germanico sermone in Latinum conversa.*” Its joint editors were Drs. Stapf and Gross, Hahnemann's well-known and cherished disciples, and Earnest George von Brunnow. It contained the medicines of the first volume of the original work, as they stand in the second edition, viz. *Aconite, Arnica, Belladonna, Capnabis, Cocculus, Cyna*, (sic), *Dulcamara, Mercurius, Moschus, Nuxvomica, Oleander, Opium*. In 1828 appeared a second volume of the same kind, including medicines from the second and third volumes of the original, viz., *Arsenicum, Bryonia, Ferrum, Helleborus, Ignatia, Magnes, Pulsatilla, Rheum, Rhus, Scilla*. With this, unhappily, the undertaking came to an end.

I have examined these volumes (they are in the library of the British Museum) with much interest. The translation seems accurate and perspicuous. A vocabulary of the German terms used by Hahnemann to

denote the various shades of sensation, with the Latin equivalents chosen or invented for them, is prefixed. As an explanation is also given by these well-informed disciples of what the master exactly meant by each term, this table is of great value, both to students and to intending translators. The editors have rendered Hahnemann as he stands, with one exception. His practice, in the first and second editions of the *Reine Arzneimittellehre*, was to arrange his own symptoms first, and then the "observations of others," including in the latter both the provings furnished to him and the citations he collected from authors. In the Latin version it seems to have been considered that the provings of the master's pupils, made under his direction, were worthy of being incorporated with his own, as homogeneous in character therewith; while the symptoms taken from recorded observations of poisoning and over-dosing might stand by themselves.

2. I will now speak of French translations. These have all been made by a Mons. A. J. L. Jourdan, membre d'Académie Royale de Médecine. From his prefaces it would appear that he was not a homœopathist himself, but did his work in the interests of general literature and science. He began with the first edition of the *Chronische Krankheiten*, his version of which appeared in Paris in 1832. In 1834 followed the *Reine Arzneimittellehre*, translated from the third edition of the first two volumes and the second of the rest. In 1846 he published his rendering into French of the second edition of the *Chronische Krankheiten*, thereby completing his work. The first and third are reproductions of the original just as it stands; but his "Traité de Matière Médicale, ou de l'action pure des médicaments homœopathiques" re-arranges the medicines after the alphabetical order of their French names. In all three the prefaces and notes are given in full; each symptom has a paragraph to itself, and the authorities are affixed. The references, however, for the symptoms cited from authors are—save in the few earlier medicines of the *Reine Arzneimittellehre*—omitted.

I do not know what is thought by experts in the French and German languages of the accuracy of this translation. So far as my own knowledge enables me to speak, I can say that it has not disappointed me when I have consulted it. The omission of the references of the cited symptoms is of little consequence, as any one who wished to follow them up would consult the original. On the other hand, the reproduction of the whole series of medicines of each work, and the full presentation of the prefaces and notes, are features of great value, as will be better understood when we come to speak of the deficiencies of our English version in these respects.

3. There had been no translation of Hahnemann's pathogenesies into English until 1846, when there appeared in New York, from the pen of Dr. Hempel, five volumes of the *Materia Medica Pura*, and five of the *Chronic Diseases*. This version has preoccupied the field, and has continued to be the only one whereby English students could read the master in their own language.

The medicines of the *Materia Medica Pura* are herein re-arranged according to the alphabetical order of their Latin names, beginning with *Aconite*

and ending with *Veratrum*. The third edition of the original has been used for those of Hahnemann's first volume, but not, as might have been expected, for those of his second also. All names of authorities are omitted, so that for the medicines where the symptoms from all sources are thrown together we have no clue whatever to their origin, and in no case can we distinguish between the results of provings and the observations cited from authors. The pathogeneses in which Hahnemann has separated his own symptoms from those contributed by others are variously treated. Sometimes (as with *Bryonia*) the latter are made to follow the former in each division of the schema, enclosed in square brackets for distinctness. Sometimes (as with *Bismuth*) the two sets of symptoms are rendered successively, as in the original. Sometimes (as with *Argentum* and *Camphor*) they are thrown together in one series without distinction. The symptoms are printed continuously, and divided into paragraphs according to Dr. Hempel's classification of the schema.

From the list as thus presented to us we miss a number of medicines belonging to the original, and receive in explanation the following note :

“Several of the antipsorics had been originally introduced by Hahnemann into the *Materia Medica Pura* ; at that time Hahnemann had not yet discovered the antipsoric nature of those remedies. Afterwards, when this discovery had been made, those antipsorics were tried more minutely, and together with the other antipsorics were published as a separate collection under the name of ‘Chronic Diseases.’ The first proving of these remedies contained in the *Materia Medica Pura* has been omitted in the translation, and only the results of the second proving have been given to the American reader, which are much more complete. The medicines which have been thus proved over again are the following — Dulcamara, Causticum, Arsenic, Digitalis, Aurum, Guaiacum, Sarsaparilla, Sulphur, Calcareæ acetata, Muriatic acid, Phosphoric acid, Manganum, Carbo, Colocynthis, Stannum.”

I give this passage just as it stands, though it does not raise our expectations as to Dr. Hempel's power of writing English. It has, however, graver faults than this. Its list of medicines omitted because of their reappearance in the *Chronic Diseases* is imperfect ; it should have included *Conium* and *Hepar sulphuris*. Its statement that these medicines had been “tried more minutely,” “proved over again,” is very incorrect. Two of them (*Dulcamara* and *Guaiacum*) have but a dozen or so more symptoms in the *Chronic Diseases* than in the *Materia Medica Pura* ; and one (*Stannum*) has as many less. *Calcareæ acetica* was not “proved over again,” but its symptoms were incorporated with those obtained from *Calcareæ carbonica*, and distinguished by a sign, which Dr. Hempel quite as often omits as inserts. Nor is it true of the remaining medicines that they have been re-proved, so that their previous pathogeneses could be considered obsolete. The great majority of the additional symptoms given to them in the *Chronic Diseases* were furnished by Hahnemann himself, from his observation of their (supposed) effects on the patients who were taking them. He included them in the latter work for the sake of com-

pleteness; but he obviously meant it to be used by those who already had the *Reine Arzneimittellehre* in their hands, for he shortens his prefaces, omits his notes and (very frequently) his references to the observations cited from authors, and even (as Dr. Wilson has shown)\* sometimes leaves out those notes of time after taking the dose and day of proving which he elsewhere affirms to be so important as *data*.

I must think, then, that Dr. Hempel establishes no justification for omitting these medicines from his translation of the *Materia Medica Pura*; and that his work is materially injured by their removal. English readers have little notion of what *Sulphur* and *Stannum* (to mention no others) were in their original form.

Besides these omissions, which are intentional, the pathogenesies of *Ferrum* has dropped out, doubtless by accident.

But I have now to speak of graver defects, compared with which those already mentioned are insignificant. The duty of a translator varies according to the work on which he is engaged. If the latter be a poem or other artistic composition, his aim must be to give to the foreign reader as nearly as possible the same æsthetic impression as would be received by the author's own countrymen. Hence he is justified in taking a good deal of liberty with the words and structure of the original, so long as he preserves its actual meaning. It is otherwise, however, with such a work as the *Materia Medica*. Here everything depends upon exactness of expression and fulness of detail. Style is (comparatively) no object; the one thing the student needs is the faithful reproduction of the words of the original, so that he may be at no disadvantage as compared with those who read the latter. The two, original and translation, ought to appear if placed side by side as doubles one of another.

The question whether Dr. Hempel has carried out these obvious principles was raised by Dr. Wilson in the *Monthly Homœopathic Review* for 1862-3, and answered in the negative. I think that any who read his papers and the controversy they provoked, together with the comments of this Journal in the corresponding volumes, must admit that his case is abundantly made out. The most serious blot he has hit is Dr. Hempel's wholesale omissions. Fourteen medicines are mentioned in which the number of symptoms left out has been ascertained; they range from 13 in the case of *Aconite* to 472 in that of *Phosphorus*. Considerable evidence is moreover adduced in proof of carelessness in the rendering of those symptoms which are preserved. These omissions and errors are indeed mainly discoverable in the later medicines of the *Chronic Diseases* when the translator may presumably have become weary of his gigantic task, and yet have been under publishers' pressure to complete it. But though such explanation may palliate his fault, it does not repair our loss.

My own sense of deficiency of Dr. Hempel's translation has been mainly excited by the renderings of Hahnemann's introductions and notes to the several medicines, for which I have often consulted his volumes when the

\* *Monthly Hom. Review*, vii, 167.

original has presented difficulties to me. I have so often been disappointed by the curtailment, omissions, and obvious mistranslations I have encountered that I have ceased to have any reliance on his version being a faithful exponent of the original, and never venture now to quote Hahnemann as given by Hempel lest I should misrepresent him. When I put this together with the omissions and errors noted by Dr. Wilson, and the faults of the whole presentation of the work I have already mentioned, I cannot but come to the conclusion that we do not really possess Hahnemann's *Materia Medica Pura* and *Chronic Diseases* in the English tongue.

The inference must surely be that a new translation is imperatively needed, and that forthwith. Some dozen years ago a good deal was said about a new version from Dr. Quin's pen as being in preparation, and it was even advertised as to be published shortly. Nothing more has been heard of it; and the long retirement of Dr. Quin from public duties gives little hope of its accomplishment. Again, it is true that the pathogenesies of Hahnemann are being translated afresh by Dr. Allen for his *Encyclopaedia*; and any one who desires to have a faithful rendering of any given symptom may depend on finding it there. But Hahnemann's pathogenesies are necessarily in this work incorporated with others, and its plan excludes his prefaces and introductions, and (to a great extent) his notes. Since, therefore, we can neither expect from the former quarter nor receive from the latter the thing we want, there is nothing for us but to undertake a new version for ourselves.

For such a work I earnestly plead; and think that England and America—as equally concerned—might well co-operate in the task. There are on both sides of the Atlantic masters alike of German and English from whom any translation would be received with implicit confidence. I myself have no place among these; but there is one element of the work which I could and would gladly supply. Some five thousand of Hahnemann's symptoms are quotations from authors—English, Latin, French and Italian as well as German. It is easy to see what confusion is made when these are retranslated into English from Hahnemann's rendering of them into German. The examination of their originals which I am carrying out for Dr. Allen will enable me to supply all these quotations, if in English, in their own words, if in Latin, French, or Italian, in direct translation; besides the verification, illumination, and correction which I can give them from the same sources. I should be ready to perform this part of the work; and if two or three competent scholars from England and America would sustain the main undertaking, we might have in a year or two an English version of at least the *Materia Medica Pura* of which both countries would be proud.

I should feel grateful if any of the American journals would reproduce so much of this statement and appeal as they might think necessary.—*The British Journal of Homoeopathy*, January 1877.

## Correspondence.

## RETINITIS PIGMENTOSA.

To the Editor, *Calcutta Journal of Medicine*,

SIR,—I am particularly interested in cases of Retinitis pigmentosa which, in my opinion, requires elucidation in many points.

Dr. Macnamara, in his *Manual of Diseases of the Eyes*, (pp. 400 & 401), says as follows: Retinitis pigmentosa is said to be most commonly met with among the offspring of persons nearly related to one another, but this can hardly be the cause among the natives of India, as they are most scrupulous in observing the restrictions they place upon the intermarriage of relatives, and yet I have seen some twelve or fifteen instances of this disease among my native patients within the last twelve months. \* \* I am disposed to look upon the disease as a result of inherited syphilis. I have never been able to refer these symptoms to the effects of any of the so-called inflammatory changes; the disease seems to me to be one of a degenerative character, progressing very slowly, and often becoming stationary for years. The only facts which, in my mind, are opposed to this view of its relation to syphilis are, that I have not noticed the notched teeth, nor have I seen the affection in more than one member of a family; and lastly, the disease does not seem to be influenced in the least by any treatment with which I am acquainted.

Dr. Macnamara's remarks on the origin of this disease are perhaps sufficient for the general outlines of a *Manual*, but more additional information is required for those who take a special interest in this subject. From the description it is not quite clear whether Dr. Macnamara refers the origin of the disease exclusively to hereditary syphilis, or also to acquired syphilis, although the notched teeth (Hutchinson), mentioned above, would point to the former view. To me it appears that this particular matter requires further research and confirmation.

Galesowsky, too, often found syphilis to be the origin of the disease, and the same observation was made by Manuhardt and Kugel in Western Asia; but the assertion does not hold for Germany.\* Manuhardt says that in Constantinople he discovered in no case consanguinity of the parents to be the origin.† Whilst, therefore, Macnamara, as for the natives of India, states that hereditary syphilis is the cause, the other authorities attribute the disease to secondary, that is, acquired syphilis. The symptoms, however, are sufficiently described neither by the former nor by the latter. Dr. Macnamara's cases were, it appears, purely typical form of Retinitis pig-

\* This agrees with observations made by me in France, England, and Italy.

† (Leber anomale formen der Retinitis pigmentosa von Th. Leber-arch f. o.)

mentosa because, in describing the symptoms of the typical form he does not mention whether any of the cases observed by him exhibited deviations from the rule.

The typical form of Retinitis pigmentosa is characterised by the well known pigmentation of the retina, the concentric contraction of the field of vision whilst the central sight remains for a long time intact ; the hemeralopy ; the symmetrical chronic course and the causes of consanguinity of the parents and the transfer from parents to children which frequently are to be found. Besides these typical cases of Retinitis pigmentosa there are numerous others met with, which contain only a part of the characteristic symptoms whereas they deviate in other ones, but yet show clearly its relation to the Retinitis pigmentosa by those symptoms they have in common. Leber\* describes these cases as anomalous forms of the Retinitis pigmentosa and uses the principal ones for the establishment of the under-mentioned rules, by means of which he places them in well marked outlines. I wish this classification to be looked upon as a fundamental one in order to gain destined questions and answers.

- 1 *Typical Retinitis pigmentosa.*

2 R. p. with typical contraction of the vision and anomalous appearance under the ophthalmoscope

(a) *R. p. without pigment*, which passes through every possible transition to the common form.

•(b).• *R. p.* with disseminated atrophic spots of the choroid.

3 R. p. with a typical report by the ophthalmoscope and anomalous form of the contraction of the vision.

(a.) *R. p.* with a predominant reduction of the central sight.

(b) *R. p.* with a good central sight, but with deviations in the other symptoms of the vision. Unsymmetric limitation of the field of the vision, deficiency of hemeralopia (rarely), this was once only and solely represented by nyctalopia (Hanse)

4. *R. p.* with an anomalous fundus of the eye and anomalous trouble of the vision.

(a.) Congenital Amblyopy or amaurosis dependent upon *R. p.*

These are distinguished from 3a by the incipient failure of the pigmentation of the retina which is developed during the first year of life, and by the congenital appearance of mostly complete blindness.

(b.) *Not congenital R p with preradial central amblyopia, pigment in the retina being absent.* For that reason are these distinguished from 3a, by the more or less complete deficiency of pigmentation of the retina, distinguished from 4a by the disease not being congenital.

(c.) *Chorio-retinitis with anomalous symptoms*, as far as congenital affection exists. • •

5. *R. p.* with a deviating course, unsymmetrical participation of both eyes, &c.

Über anomale formen der R. p. Arch. f. O.

To this classification by Prof. Leber I wish to add a series of questions which are, in my opinion, of importance in examining a case.

1. *Nos. of the case, or name.*
2. *Sex.*
3. *Age.*
4. *Patient's position in his or her family in order of birth.*
5. *Does the disease run among brothers and sisters?*
6. *State of the eyes.*
  - (a.) *Vision.*
  - (b.) *Field of view.*—(Concentrical, unsymmetrical constriction; defects; centric or periphtric fixation.)
  - (c.) *Ophthalmoscopic examination.*
  - (d.) *Existing complications and concomitant symptoms.* (nystagmus; hemeralopy; nictalopy, etc.)
7. *Etiology.*
  - (a.) *Direct transfer of the disease by the parents.*
  - (b.) *Consanguinity of the parents.*—(which degree?)
  - (c.) *Syphilis. Inherited S. Acquired S.* •
  - (d.) *Particular remarks as to the etiology.*
8. *General remarks.*

I would feel greatly obliged if any medical officer, who has it in his power to aid me in elucidating these matters, would kindly publish his observation or communicate with me direct as it would be a great matter were it possible to place the etiology of R. p. on a more satisfactory basis and to decide whether the suggestion of Dr Macnamara regarding the connexion of the disease with inherited syphilis is true for natives. Further, it would be interesting to learn whether the cases arriving from hereditary or acquired syphilis in India appear under the typical features or, whether they show deviations similar to the above mentioned, and what influence therapeutics would have upon them.

Yours &c,  
G. Haase, M. D.

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HAHNEMANN, AND HIS WORK.\*

GENTLEMEN,—When I beg to return you thanks for the honor you have done me in offering me the chair of this Meeting, I beg of you at the same time not to charge me with the customary insincerity when I say that I do not, in an absolute sense, deserve the honor. I feel my unworthiness the most profoundly when I think of the very grave responsibility that attaches to the honor.

To preside at an anniversary meeting, of whatever description it may be, is the most difficult task for even the most well-informed, accomplished and cultured man. All anniversaries are beset with dangers. They have all a tendency to degenerate into hero-worship, to sufficiently guard against which is almost an impossibility. With all his boasted advancement in knowledge, man has not yet been able to pass the stage of fetishism. The form only of the fetish has changed, and we can

\* Being the Presidential Address at the Meeting held in the Albert Hall, College Square, Calcutta, on the 10th April, 1887, in Commemoration of the 132nd Anniversary of Hahnemann's Birth.

scarcely say, for the better, for the fetish is now man himself.

The Present affords the key to solve the mysteries of the Past. Sir Charles Lyell rescued geology from vague hypotheses and speculations by directing attention to the changes that are going on before our very eyes, in the light of which, making allowance for time, the mysteriousness and wonder of the mighty changes of the past vanish. In the same way if we attend to the changes that are taking place in, if I may say so, the geological formations of human society, if we watch with narrow scrutiny the development of individual characters and the course of events singly and in the aggregate, we shall be able to view with less wonder, than we now do, the men and the events of past times that have exercised and are still exercising such powerful influences for good and for evil upon the destiny of the whole race itself.

As a general rule we do not scrutinize the present as we ought and can, and even the partial and fragmentary knowledge that we cannot help acquiring we do not apply to understand the past. The consequence is, that the records of the past, necessarily fragmentary and sometimes designedly partial and one-sided, pass uncriticized or only partially so. And hence men and events acquire a magnitude and an importance which they do not intrinsically possess. From the point of view of truth this is not as it should be, even if it had not exercised any evil influence on the progress of mankind. But we know and feel how enormous is the evil compared with the infinitesimal good that such a state of things has brought about.

The evil influence, that has resulted from the exaggerated ideas about men and events, that I have spoken of, has been most felt in religion. So great indeed has this influence been that you cannot cite examples even for philosophical speculation without encountering the most bitter opposition and the most unrelenting persecution even in the present day of vaunted enlightenment and progress. Hosts of followers

and worshippers of inspired prophets, of incarnated deities, of sons of God, of friends of God, will rise up against you, and repeat the dark deeds of their predecessors in history in the name of religion and the God of all mercies, if you would dare apply the canons of human criticism to judge of the men and the events raised to the supernatural by Time.

This evil influence has been felt where it might have been least expected,—in the domain of the intellect. Though truly the father of modern science, what an obstructive influence on the progress of knowledge in general had Aristotle exercised for centuries! Though for his time a most accomplished and philosophical physician, what baneful influence on the progress of the healing art has been exercised by Galen! And has not, till recently, the name of the great Newton himself stood in the way of the acceptance of the undulatory theory of light?

Thus, gentlemen, you see there is, strangely and paradoxically enough, danger to the world from its own great men. The danger is not unoften of the most lamentable, because of the most inhuman and brutal character, and it is always of an obstructive character as regards progress. This danger is fostered and aggravated by the general tendency to give prominence to the good qualities of great men, and pass over their faults. This is the sort of danger I apprehend from our exaggerated estimate of the great man in honor of whose birth-day we have met here this evening. This is the reason why I did not join in former similar demonstrations. And this is the reason why it was not without considerable hesitation and reluctance that I have agreed to take part in this day's proceedings.

That my apprehensions are not unfounded, that they are not the imaginary fears of an over-sensitive and hypercritical mind, will be admitted by all who have a moderate acquaintance with the literature of our subject. Have not some of the extreme followers of Hahnemann looked upon him as the Messiah of Medicine, his *Organon* and other later writings as the gospel of the Healing

Art? Is it not deemed heresy, to deviate even by a hair-breadth from his teachings? Under these circumstances it is not easy for one who really believes that his is the greatest name in medicine, that his discoveries far outshine any other discoveries in importance and beneficent influence upon the progress of the healing art, and therethrough upon the destiny of the human race, it is not easy, I say, under these circumstances for such an one to maintain equilibrium of mind when considering his character and achievements, especially on occasions such as this when people meet from a sense of duty and gratitude to do honor to his memory. But great as may be the great men of the world, greater by far is truth. Indeed, in my humble opinion, the greatness of great men should be judged not by the amount of work they have done, but by the amount of truth they have worked out. And against this should be set off the amount of error which mankind have inherited from them.

I trust, gentlemen, I have made it clear to you that in calling this meeting we have taken upon ourselves a task which is not to be performed indifferently and with a light heart. Every one of us who has taken an active part in the promotion of this movement has to bear a share of the responsibility of its issues, and the largest falls upon him whom you have been pleased to make your exponent. The issues are so important and far-reaching that I truly and sincerely feel, as I have already told you, my absolute unworthiness of the honor you have done me. But all that man can do is to do his duty to the best of the ability that has been given to him, leaving the rest to the Supreme Disposer. I shall try to do mine to-day, and the best thing, I think, I can do is to present you a rapid sketch of the life and work of the great reformer and regenerator of medicine. To accomplish this object I shall have often to quote from myself, for which I have to crave your indulgence.

A full, detailed, and critical biography of Hahnemann is yet a desideratum. The latest contribution

on the subject, Wilhelm Ameke's History of Homœopathy, though most welcome, does not add much to real biography. Nevertheless enough can be gleaned from what we already have, his autobiography, his letters already published, his works, and contemporary records, which will enable any honest and impartial critic to judge of him as a man, and of his place in the history of medicine. His autobiography ends August 30, 1791, when he was thirty-six years of age, and just when the idea that was to revolutionize medicine was dawning upon his mind. What induced him to write this autobiography at all, and what caused him to desist from continuing it further, it would be idle to speculate. Short as it is, consisting of only half a dozen pages octavo, we ought to be grateful for this autobiography, inasmuch as without it the world would have remained ignorant of those incidents of his life up to his thirty-sixth year which give unmistakeable evidence of the stuff he was made of.

Hahnemann was born in a small village of the name of Meissen, at the confluence of the Elbe and the Meissa, "which," we have his testimony, "is one of the most delightful spots in Germany, a circumstance," he adds, "which, in all probability, contributed, in childhood, to inspire me with an ardent love of nature." The date of his birth was the 10th of April, 1755, which, I find, was a Thursday. The parentage, so far as the conventionalism of society goes, was very humble. His father was a painter in the Porcelain Manufactory of the village, and was the author of a little book on Painting in Water-colors. But though poor in worldly riches, the man had a rich and noble mind. "He had the soundest and most correct ideas," says the son, "upon every subject deserving consideration. And his opinions were strongly impressed upon my mind. 'To act, and to be without pretension,' was his fundamental maxim, enforced even more by example than by precept." We need hardly add, the maxim was not only not lost upon Hahnemann, but became an abiding principle of action, throughout his

long life, and was undoubtedly one of the chief causes of his remarkable success.

He received his "external education," as he calls it, in the Grammar School, and afterwards in the College, of his native village. At the former he remained up to his sixteenth year, and subsequently up to his twentieth at the latter. Though with naive simplicity he says, "at school nothing of importance occurred," yet the fact was that his instructor in classics and German composition, the rector of the College, Muller, was so fond of him for his extraordinary intelligence and acquirements that he loved him as his own child, granted him many privileges, and wished him, in his twelfth year, to instruct other pupils in the rudiments of the Greek language. "Afterwards," says Hahnemann, "he listened patiently to my criticisms when construing the classical writers privately with his boarders, and frequently preferred my opinion to his own."

His father, "starving on a small income with a numerous family," was naturally opposed to his son's receiving an University education, and on more than one occasion had withdrawn him from the grammar school to bring him up in some profitable profession.\* But his masters were so enamoured with his powers of mind and capacity for learning that for a period of eight years they accepted no remuneration, and earnestly requested the father to leave the son with them to follow his own inclinations. At last in Easter, 1775,

\* We have the authority of Dr. Fischer (*Biographical Monument to the Memory of Samuel Hahnemann*) for the following, for which he himself is indebted to a friend :

"At first he was bound apprentice to a grocer at Leipsic ; but this occupation proved insupportable to the youthful genius. After a short time, he secretly left his master, not through any indiscretion, but actuated by a strong desire for something better and loftier. He returned to his father's house trembling with fear ; his mother having concealed him for several days, at last succeeded in pacifying his father. Under such unfavorable circumstances as these, he had prepared the way for an academical course.

"It was customary at the school at which he was educated, for a pupil, who was on the point of leaving, to compose an Essay. The subject selected by the future founder of Homœopathy was one which indicated,

with twenty thalers (the last sum he received from him) his father sent him to the University of Leipsic, that centre of German learning and science. Here he soon gained the love and esteem of the professors, and one of them Prof. Börner was kind enough to procure for him gratuitous admission to all the medical lectures. He supported himself by giving instruction in German and French to a young Greek gentleman of fortune from Jassy, in Moldavia, and by translations from the English language. At Leipsic Hahnemann strictly followed his father's principle of not only hearing and learning, but of carefully examining and investigating every subject. He was never tired of reading, but he selected those books only which were likely to be serviceable to him, and never more than he could digest. He exercised the same economy in his attendance at the lectures, for though freely admitted to all, he attended only those which appeared to him most advantageous. This would be dangerous precedent for the ordinary student, but for one of his extraordinary powers this was not only allowable but perhaps necessary.

At Leipsic there was no establishment for the *practice* of medicine, and Hahnemann was not to be satisfied with a mere theoretical knowledge of it. Small as his earnings were from private tutorship and from translations, by dint of economy he had accumulated a sum of money sufficient to pay his passage to Vienna, and maintain him there for some time. And in this confidence he went to Vienna. "I am indebted," says he, "for the whole of my professional attainments to the Hospital of the Brothers of Mercy of Leopoldstadt, and especially to the great practical genius of Von Quarin, the private physician of the Emperor." Quarin,

even at that early period of life, the natural tendency of his mind to examine and elucidate the laws that regulate the phenomena of physical science. It was the wonderful structure of the human hand."

"Who would not like to see," asks Dr. Dudgeon, "how the boy Hahnemann treated this subject, his selection of which shows a strong bias towards natural science?"

like the professors of Meissen and Leipsic, at once perceived the genius of Hahnemann, and honored, loved and instructed him, as if he had been his only and first pupil, and was in the habit of taking him to visit his patients,—a privilege he granted to no one else, and all this without any expectation of remuneration. Notwithstanding this kindness of Dr. Quarin, Hahnemann's stay in Vienna could not be long, as by a disgraceful trick practised upon him at Leipsic he had lost a considerable portion of his hard-earned capital. At the expiration of nine months' stay he found that he had nearly exhausted the 68 florins which were left him, when providentially an invitation, no doubt at the recommendation of Dr. Quarin, came from Baron von Brueckenthal, Governor of Transylvania, to accompany him to Hermanstadt, as private physician and librarian. "I had here" (in Hermanstadt), writes he, "an opportunity of acquainting myself with several languages and sciences connected with my profession. I arranged his (the Governor's) excellent collection of coins and his valuable library; and after having practised nearly two years in that populous town, I left this generous people for the purpose of taking my degree of Doctor of Medicine at Erlangen, which I was now able to accomplish." He defended his dissertation on the 10th of August, 1879, and obtained the coveted degree. This was in the 24th year of his age. It were to be wished that all our medical students followed Hahnemann in this spirit of healthy ambition, and never remained satisfied till they had obtained the highest honors it is in the power of our Universities to confer. And it were to be wished that no one would deem himself competent to treat the disorders of that most exquisite and complicated organism the human frame, until he had qualified himself by all available and legitimate means.

Having now had the highest aspirations of a medical student fulfilled, Hahnemann must now become a medical man, and where could he think of settling as a practitioner. "Now Swiss," writes he, "could be more attached to his mountain home than a Saxon to

his native country." He accordingly returned to Saxony, and commenced his professional career in the small mountain town of Hettstadt, but finding it impossible to acquire there either intellectual or physical improvement, after a stay of nine months he removed, in the spring of 1781, to Dessau, where he says he found society and an opportunity of extending his information. Here he devoted his leisure hours to the study of Chemistry. At the close of 1781 he was appointed official physician at Gommern, near Magdeburg, where he continued for a period of three years. It was here, shortly after his appointment, that he married Henriette Kuchlerin, the step daughter of an Apothecary, and, in his own words, "began to experience domestic happiness, and to feel the advantage of his official duties."

But Hahnemann's genius must find wider fields for its expansion, and could not brook to be shut up in this "insignificant place." "Like most men of his type," says Russel, "he pushed to the Capital, and in the year 1784, at the age of thirty years, he found himself in Dresden." Here, as in other places, in his previous journeyings, he won the esteem of the chief notabilities. Dr. Wagner, a physician of the highest respectability, and a perfect master of medical jurisprudence, supplied his deficiencies in this branch, and during his illness, "entrusted to his charge, for an entire year, all the infirmaries under his care, a wide field for the philanthropist." Adelung, the chief superintendent of the electoral library, and the librarian, rendered his stay in Dresden instructive as well as agreeable. It was here at Dresden that Hahnemann published 18 treatises on various subjects, chiefly chemical. Among others were the description of mercury, known to this day as the *mercurius solubilis Hahnemanni*, his treatise on the purity and tests of wine, and his celebrated treatise on poisoning by arsenic, which is still quoted as an authority by the best writers on Toxicology. The great Swedish Chemist Berzelius is reported to have said of him, "this man would have been a great

chemist, had he not turned a great quack." Well has Dr. Dudgeon remarked: "We may take Berzelius's opinion of Hahnemann's skill in chemistry; but try his physic by other than chemical tests."

"Thus," he writes in his autobiography, "in the bosom of my increasing family, four years passed at Dresden or its neighbourhood, more speedily than to the unexpected inheritor of a large fortune. In order to be nearer the centre of science, I removed about Michaelmas, 1789, to Leipsic, in full confidence that Providence would guide whatever the lot of my daily life might be. Four daughters and one son, with my beloved wife, constitute the happiness of my life. In the year 1791, the Economical Society at Leipsic, and on the 2nd of August, 1791, the Academy of Sciences at Menz, elected me a member." Here closes the autobiography dated, "Leipsic, August 30, 1791."

It will be seen that no mention is made here of the deep distrust he had begun to feel in the ordinary methods of medical treatment, and of the incident which occurred in 1790, which was the grandest turning point in Hahnemann's life-history, and in the history of medicine. Writing to Hufeland in 1808 he says: "It was painful to me to grope in the dark, guided only by our books in the treatment of the sick. ... I had conscientious scruples about treating unknown morbid states with unknown medicines. ... To become in this way a murderer, an aggravator of the sufferings of my brethren of mankind, was to me a fearful thought,—so fearful and distressing was it that shortly after my marriage I completely abandoned practice and scarcely treated any one for fear of doing him harm and occupied myself solely with chemistry and literary labors. But children were born to me, several children, and in course of time serious diseases occurred, which, because they afflicted and endangered the lives of my children—my flesh and blood—caused my conscience to reproach me still more loudly that I had no means on which I could rely for affording them relief. ... Where shall I look for aid, *sure aid?*

sighed the disconsolate father on hearing the moaning of his dear, inexpressibly dear, sick children. The darkness of night and the dreariness of a desert all around me; no prospect of relief; for my oppressed paternal heart! In an eight years' practice, pursued with conscientious attention, I had learned the delusive nature of the ordinary methods of treatment, and from sad experience I knew right well how far the methods of Sydenham and Frederick Hoffmann, of Boerhaave and Gaubius, of Stoll, Quarin, Cullen, and De Haen were capable of curing. But perhaps it is in the very nature of this art, as great men have asserted, that it is incapable of attaining any greater certainty. Shameful, blasphemous thought! I exclaimed... Sooner than admit this blasphemous thought, I would have abjured all the medical systems in the world! No! There is a God, good God, who is all goodness and wisdom! and as surely as this is the case must there be a way of his creation whereby diseases may be seen in the right point of view, and be cured with certainty, a way not hidden in endless abstractions and fantastic speculations."

It was in this deep conviction of his heart that he labored and prosecuted his studies and carried on his researches, and it was not long before the great God, in whose infinite wisdom and goodness he had such unbounded faith, revealed to him the truth for which he was seeking. It was in the year 1790, that he translated Cullen's *Materia Medica*, and the author's article *Cinchona* was to him what the fall of the apple was to Newton. Cullen's explanation of the antiperiodic virtues of the drug was a tissue of suppositions. The Peruvian bark was, by virtue of its bitterness and astringency, supposed to be a tonic, a tonic of the stomach, and through the stomach, of the rest of the system. Thus the Bark was supposed to do this and do that, but nothing was said as to what it actually did. Though Cullen went so far as to say that "he has never met with anything in any book which made him doubt the truth of his view," Hahnemann was not

satisfied. He not only doubted the view but rejected it on the ground that there were other antiperiodics which were neither bitter nor astringent. He must know what Cinchona actually did. "For the sake of experiment," says he, "I took for several days four drachms of good cinchona bark twice a day," and the result was, he got paroxysms of fever which lasted two to three hours each time that he took the drug, returning when he repeated the dose, otherwise not.

Was he guided to this experiment by his knowledge of what Haller had written about the necessity of proving drugs in health, or what Stahl had written about the curative powers of similarly acting remedies? Hahnemann is himself silent about the matter, and we have no means of ascertaining the truth. The probability is that the experiment was spontaneously suggested by his own mind, and that at the time he had no knowledge of what Haller, Paracelsus, Stahl, and others had written. We do not know what he did with his discovery during the two and half years that he spent at Leipsic. He could not have been idle, but must have been cautiously collecting evidence about it. For we find him from August 1792 in charge of an asylum for the insane in Georgenthal in the Thuringian forest, which he must have accepted not only to give him a competency, but no doubt chiefly to have an opportunity of putting his discovery to the test, and where in all probability he did put it to the test. In this institution he effected a most remarkable cure of insanity in the person of the Hanoverian minister, Klockenbring, whose disease was brought on by a sharp satire, and whom in all probability he treated with stramonium. For he approvingly speaks of the prescription which the patient had written out for himself, of which the chief ingredient was the seeds of *datura stramonium*, and wonders "how was it that in the midst of the very hurricane of its most extravagant passion, his mastless and helmless mind lighted on a remedy so excellent in insanity and unknown to many physicians?"

It is not known, but it should be known, that if not the very first,\* Hahnemann was one of the first who insisted upon, and carried into practice, the moral treatment of the insane in opposition to the barbarous and brutal one of coercive. In his report of Klockenbring's case he says ; " I never allow any insane person to be punished by blows or other painful corporeal inflictions, since there can be no punishment where there is no sense of responsibility, and since such patients only deserve our pity, and cannot be improved but must be rendered worse by such rough treatment. He (Klockenbring) often showed me with tears in his eyes the marks of the blows and the stripes his former keepers had employed to keep him in order. The physician of such unfortunate creatures ought to behave so as to inspire them with respect and at the same time with confidence ; he should never feel offended at what they do, for irrational persons cannot give offence. The exhibition of their unreasonable anger should only excite his sympathy and stimulate his philanthropy to relieve their sad condition." Thus in this matter he was far in advance of the physicians and men of his time, with the exception of Phillipe Pinel in France and William Tuke in England. And it is a singular coincidence, pointed out by Dr. Dudgeon, that in the very year when Hahnemann was treating his insane patients in this humane manner at the Georgenthal asylum in Germany, the great Pinel made his first experiment of unchaining the maniacs in the Bicêtre in France. The name of Hahnemann should be associated with those of Pinel and Tuke as inaugurating a really rational treatment of the most unfortunate class of patients with whom the physician and the philanthropist have to deal. The restless spirit of Hahnemann did not remain long in charge of the Georgenthal asylum, but removed thence to Walsleben, thence to Pyrmont, thence to Wolfenbüttel, thence to Königsutter, displaying at each place wonderful intellectual activity, by valuable contributions to medical literature. Königsutter is destined to remain for ever famous, as it was here in

1796 that Hahnemann wrote, for Hufeland's *Journal*, his celebrated Essay, "On a New Principle for ascertaining the Curative properties of Drugs," in which he gives for the first time a definite shape to his discovery of 1790 ; in which, having by a masterly analysis and review shown the futility of the methods already in vogue, namely, the method chemical, the method of mixing unknown drugs with the blood, the method of injecting drugs into the blood-vessels of animals, the method of administering drugs to animals by the mouth, the method based upon their external sensible signs, and so on, he leads irresistibly to the conclusion that nothing remains but *experiment* on the human body, experiment which should not be left to accident, but must be conducted systematically and methodically, in order to discover the pure action of each drug by itself. Having done this, the physician must next ascertain, "what do observations of its action in this or that simple or complex disease teach us ?" which, he says, may be gathered from the practical writings of the best observers of all ages, but more especially of later times. He concludes by throwing out a suggestion that "we should imitate nature, which sometimes cures a chronic disease by superadding another, and employ in the (especially) chronic disease we wish to cure, that medicine, which is able to produce another very similar artificial disease, and the former will be cured ; *similia similibus*."

What strikes one as very remarkable in this Essay is the extreme philosophic caution with which Hahnemann proceeds in every step, and the slow, gradual inductive process which he recommends for the discovery of the curative virtues of drugs ; and the very modest, respectful and imploring language with which he addresses his colleagues. But all this did not protect him from the shafts of ridicule and calumny, which fell thicker in proportion as his success became greater and his reputation wider. Undisturbed, however, he went on, and published several essays in rapid succession in Hufeland's *Journal*.

It was about this time, 1799, the last year of his residence in Königsutter, that he made his discovery of the curative and prophylactic virtues of Belladonna in scarlet fever, a discovery which, if it had been the only one he had made, would have gained him a prominent place in the temple of fame. His mode of drawing attention to the prophylactic was rather singular, and might be construed into a blot in his professional career. "He announced for publication a work on the subject, and advertized for subscribers, promising to publish the work, which should reveal the name of the prophylactic, as soon as he got 300 subscribers, and in the meantime supplying to each subscriber a portion of the prophylactic, and demanding his opinion as to its efficacy." Hahnemann was no doubt led to this proceeding by his desire to have the prophylactic tested more impartially and more numerously than it would have been if its name were known, but it was an unusual proceeding and furnished an ample excuse to his jealous colleagues to load him with accusations of avarice and selfishness,—accusations which were answered by his honorable conduct throughout his professional career. "Hahnemann revenged himself on his calumniators," says Dr. Dudgeon, "by publishing his pamphlet on *Scarlatina*, wherein he revealed the name of the prophylactic, and the facts which led to its discovery."

The physicians of Königsutter were not slow to take advantage of every the most trifling circumstance and peculiarity to suppress the rising genius. Hahnemann had for some time abandoned the use of compounds and mixtures, and restricted himself to the use of single medicines. He could thus dispense with the apothecaries and give his own medicines. The apothecaries at once saw that if this practice became universal, their occupation would be gone. They, therefore, instigated by the physicians, brought an action against Hahnemann for interfering with their privileges by dispensing his own medicines. "It was in vain," writes Dr. Dudgeon, "Hahnemann appealed to the letter and spirit of the law regulating the apothecaries."

caries' business, and argued, that their privileges only extended to the *compounding* of medicines, but that every man, and therefore still more every medical man, had the right to give or sell uncompounded drugs, which were the only things he employed, and which he administered moreover gratuitously. All in vain; the apothecaries and their allies, his jealous brethern, were too powerful for him; and contrary to law, justice, and common sense, Hahnemann who had showed himself a master of the apothecaries' art, by his learned and laborious *Pharmaceutical Lexicon*, was prohibited from dispensing his own simple medicines."

Thus shut up from practice and necessarily from prosecuting his researches in the new line which has been opened to him, he determined to leave Konigs-lutter, which he did in 1799, and to proceed to Hamburg. But misfortunes never come singly. On his way he met with a dreadful accident which cost him an infant son and fractured the leg of one of his daughters. Finding nothing to do at Hamburg, he went successively to Altona, Möllen, Eulenberg and Machern, at which last place he had to struggle with the greatest poverty. "After toiling all day long at his task of translating works for the press, he frequently assisted his brave hearted wife to wash the family clothes at night."

From Machern he went to Dessau, and from Dessau to Torgau where we find him settled till 1810. It should be noticed that notwithstanding all this persecution he did not yet return abuse for abuse, but that in "*A View of Professional Liberality at the Commencement of the Nineteenth Century*," written in 1801, he entreats his colleagues to be brothers, to be fair, to be just. "We all," says he, "strive after a common, holy object; but it is not easy to be attained. It is only by joining hand in hand, only by a brotherly union of our powers, only by a mutual intercommunication and a common dispassionate development of all our knowledge, views, inventions and observations, that this high aim can be attained:—*the perfecting of the medical*

art." And this is the man who has been accused of having been the first to use violent language. "Whatever may have occurred at a later stage of the controversy," writes Dr. Rutherford Russel, "incontrovertible dates establish that Hahnemann's early writings, which contain the greater and the most obnoxious part of his opinions, were entirely free from such a blemish; and, indeed, the fact of Hufeland standing godfather to them is ample evidence for all acquainted with the position of that eminent and popular physician, that there was nothing beyond the novelty of the statements and of the doctrines in the writings of Hahnemann to arouse the antagonism, much less to excite the resentment of the profession of which he was at that time (according to Hufeland) 'one of the most distinguished members.'"

But persecution had the effect on him which it has on all great and noble minds endowed with indomitable perseverance and an undying love of truth. It roused his intellectual energies to greater activity in the merciless exposure and destruction of error, and the gradual unfolding of truth in medicine. In his masterly little work, significantly entitled, *Æsculapius in the Balance*, published in 1805, he showed that Old Speculative Medicine, though hoary with age, was when weighed in the balance of fact found to be wanting in the essential function which alone could justify its existence, namely, therapeutic success, and that this was due to its want of a guide law for the discovery of health-instruments and of their mode of administration. Having thus accomplished the complete demolition of Old Medicine, he indicated the materials out of which the superstructure of the New, the true, rational Medicine is to be raised, in his work published in Latin, which he very properly called *Fragmenta de viribus Medicamentorum positivis*; and sketched out the plan of the edifice in his *Medicine of Experience*.

The *Medicine of Experience* was the fore-runner of the *Organon*, and was a vigorous and philosophical exposition of the new doctrine. "And what was the

reception," asks Dr. Dudgeon, "this admirable work met with—the most original, logical, and brilliant essay that had ever appeared on the art of medicine? A thousand and captious objectors arose, who, not being able to refute the masterly arguments brought forward by Hahnemann, fell to ridiculing the technicalities of the system; an easy task, since we all know that every new truth appears at first ridiculous. Nor was calumny silent. Hahnemann was loaded with the most opprobrious epithets because he introduced the custom, then unusual in Germany, of making the patients with whom he corresponded pay for each epistolary consultation. \* \* A mistake he had made in his former chemical days was raked up from the limbo of forgotten things, and imputed to him as a gross crime, and a proof of his venality and dishonesty, though, in reality, the whole story redounds to his credit;" inasmuch as being convinced of his error, he lost no time in acknowledging it and refunding to the purchasers the money he had received for his supposed newly discovered substance.

From 1805, when all the above works were published, to 1810 he must have had ample evidence of the truth of the law of cure he had discovered. For it was in this year, the last of his residence at Torgau, that he published the 1st Edition of his *Organon*, under the ambitious title of the "Organon of the Rational Healing Art," after the examples of Aristotle and Bacon. It is in this work that he used for the first time the word *homœopathy* with which he christened his doctrine. In this work he enunciates the fundamental principles of his doctrine, not with the hesitation and reserve of a man who was still groping in the dark, as he did in his Essay on a New Principle, and even in his later Essay on the Medicine of Experience, but with the boldness and confidence of one who was convinced of their truth by repeated verification. The principles enunciated were:—

1. Never to give any substance as medicine of which the pure action in health has not been ascertained.

2. Always to give but one medicine at a time, and never to repeat even that until the action of the first dose has been exhausted.

3. Always to select a remedy homœopathic to the disease, that is, one which is capable of producing a similar morbid state, or similar symptoms, to the disease.

4. To give it in such a minute dose that it shall only act on the part morbidly susceptible of its action, raised to a condition of idiosyncrasy by the disease whose likeness is represented by the pathogenetic effects of the drug.

Hahnemann was now full of the fire of the prophet. He was not satisfied with the mere publication of the *Organon*. He must preach his new doctrines himself. Leipsic, he thought, would give him a larger, a more intelligent and a more appreciative audience. He therefore left Torgau for Leipsic in the year 1811. This was his third entry into that "centre of science," in the 56th year of his age, and with a wide-spread reputation not only as an author of rare learning and talents but as a most daring and successful innovator and reformer in medicine. The *Organon* was indeed very sharply reviewed by several learned professors, but this could not stem the tide of his reputation and good fortune. Crowds of patients and admirers flocked around him, and he was in the zenith of his fame. "His earnest wish at this time," says Dr. Dudgeon, "was to found some college with hospital attached, for the purpose of indoctrinating the rising generation of physicians in homœopathy, theoretically and practically; but this plan failing, he resolved to give a course of lectures upon the system to those medical men and students who wished to be instructed in it. In order to be allowed to do this, however, he had to pay a certain sum of money and defend a Thesis before the Faculty of Medicine. To this regulation we are indebted for that able essay, *De Helleborismo Veterum*, which no one can read without confessing that Hahnemann treats the subject in a masterly way and displays an

amount of acquaintance with Greek, Latin, Arabian and other physicians, from Hippocrates down to his own time; that is possessed by few, and a power of philological criticism that had been rarely equalled. This thesis he defended on the 26th of June, 1812, and it drew from his adversaries an unwilling acknowledgment of his learning and genius, and from the impartial and worthy Dean of the Faculty a strong expression of admiration. \* \* This trial, which his enemies had vainly hoped would end in an exposure of the ignorance of the shallow charlatan, triumphantly proved the superiority of Hahnemann over his opponents, and was a brilliant inauguration of the lectures which he forthwith commenced to deliver to a circle of admiring students and grey-headed old doctors, whom the fame of his doctrines and his learning had attracted around him. He lectured twice a week, and from among the followers who gathered round him he selected a number to assist him in the labors of proving medicines, which he pursued without intermission."

But these lectures had not the desired effect on the profession at large. For, and this was a most unfortunate circumstance for the spread of homœopathy, with the ascendancy of his fame and fortune declined those qualities of mind which had characterized him in his earlier years—modesty and toleration. We have the evidence of one of his pupils who attended these lectures that "his tone became more dogmatic, and that his manner was not calculated to gain for himself and his doctrines many friends and adherents; for, whenever it was in his power, he poured forth a flood of invective and abuse against the old system of medicine and its advocates, so that the number of his hearers hourly diminished, till at length only a few of his pupils attended."

This change in his temper and manner had the necessary and inevitable effect of aggravating the jealousy and hatred of his professional brethren which were already raging high. Human nature, however, is so cowardly that the simple fact of a great man, Prince Schwarzenberg, Austrian Field Marshal, coming

to Leipsic, with the express object of placing himself under Hahnemann's treatment, his life having been despaired of by the first practitioners of the old school, stayed all opposition for a time. But the death of the Prince, though after considerable amendment had ensued, caused the opposition to be renewed with redoubled vigour, and the apothecaries, at the instigation of their patrons, the orthodox physicians, played the same game that had succeeded so well in Königsbutter, and got an injunction against Hahnemann not to dispense his own medicines.

Leipsic was endeared to him by many pleasing recollections. It was here he received his first medical education. It was here, during his second stay, that he made his first proving and got a glimpse of Nature's law of healing by drugs. His third stay was signalized by many triumphs, of which not the least was the successful treatment in 1813 of the Typhus fever that was raging at the time. And it was here that he published the second edition of the *Organon* and the first of the *Materia Medica*. But though thus endeared to him he could not afford to live at Leipsic, having been forbidden to dispense his own medicines. He could not leave the fate of his system to the tender mercies of the apothecaries, and he would not stoop to dispense medicines though gratuitously in secret. From Leipsic, therefore, he must depart, and at this juncture the invitation of the reigning Prince of Anhalt Köthen to act as his physician and councillor, and to reside in his capital with freedom to prepare and dispense his own medicines, was a God-send. In the summer of 1821, in the 66th year of his age, Hahnemann left Leipsic for Köthen, where he resided for fourteen years.

At Köthen his mode of life underwent considerable change. The only patient whom he would visit was the noble duke who had so generously given him "an asylum in the tiny capital of his tiny dominions." But though he would not visit other patients at their houses, they came in daily increasing numbers to his house. This gave him more leisure than he could

other wise command, and he used it, with wonderful diligence and perseverance for the development of his system. It was at Kothén that he brought out three editions of the *Organon*, and two of the *Materia Medica*, "each time with great additions and careful revisions." It was at Kothén that he first published his celebrated work on the Chronic Diseases, in which he propounded a new theory of their origin from three sources, syphilis, sychosis, and psora. Whatever opinion we might entertain of the theory, the work contained the provings of a large number of medicines, not to be found in his *Materia Medica Pura*, and which have proved invaluable in practice. It was at Kothén that Hahnemann triumphantly demonstrated the power of prevision and prediction which his law of healing possessed in common with all natural laws, by giving directions for the treatment of cholera, simply from a report of its symptoms and progress, and before he had seen a single case himself, directions, which, we have the united and unanimous testimony of several observers, proved marvellously successful at the time, and are still our chief guide in the treatment of that scourge of mankind.

It was at Kothén, on the 10th August, 1829, when his disciples and admirers assembled to celebrate the 50th year of his doctorate, that Hahnemann solemnly founded the first Homœopathic Society under the title of the Society for the Promotion and Development of Homœopathic Medicine, and which, it was resolved, should meet every year in some part of Germany. Hahnemann was elected its Perpetual President, but each annual meeting would be presided over by a President for the time being, elected at the previous meeting. The Society as such did not continue long. It was not to be expected that every member would bow implicitly to every dictum of the Master, and the Master had arrived at a stage of mind when apostacy had become intolerable. So at the sixth meeting (1834), which he summoned to Kothén and over which he presided, he decreed the dissolution of the Society.

On the 31st March 1830, Hahnemann lost his wife, and he remained a widower till the beginning of January 1835, when there came for treatment under him a French lady of the name of Mlle. Melanie d'Hervilly, adopted daughter of Louis Jerome Gohier, who was Minister of Justice and President under the Republic. This lady's case was pronounced by the first physicians of the day to be incurable consumption, but Hahnemann restored her to health in a few days. The lady out of gratitude resolved to devote her life to the service of the residue of her benefactor's. It was not difficult for her, with her personal charms and rare accomplishments, to win over the heart of the venerable sage, though then in his 80th year, and thus were the words of the poet fulfilled,

All thoughts, all passions, all delights,  
 Whate'er stirs this mortal frame,  
 Are all but ministers of Love,  
 And feed his sacred flame

Unworthy motives, such as selfishness and avarice, have been ascribed to this lady for her strange connection. But it is forgotten that she was descended from a French noble family of immense wealth, that she was quite independent in that respect, and that she stipulated with Hahnemann before the marriage that he should settle the bulk of his fortune on the children of his former wife, merely reserving for himself an annuity sufficient for his personal expenses.

Having succeeded in re-kindling the "sacred flame" in the bosom of the old man of eighty, it was easy for the charmer to "lure him from his family, his home, his friends, his disciples, his admirers, and his native country." And accordingly we find Hahnemann in the capital of France immediately after his marriage. Dr. Dudgeon laments the second marriage of Hahnemann and the consequent revolution in his habits and tastes in the following strain: "This second marriage, which took all his friends by surprise, is certainly a very unexpected *dénouement* in the last act of Hahnemann's life-drama. We trace with interest

the progress of the man of science through his childhood's innocence, his youth's studious hours, his manhood's struggles with adversity, and indefatigable search after truth, until the final triumph and success of the aged philosopher. We note his habits of study, contemplation, and observation of nature; his retired, almost unsocial life; his devotion to the one great aim of his existence. We see him thus engaged up to a period of life exceeding the term of ordinary old age—when suddenly he takes a gay Parisian damsel to wife; the monotonous life of the dull country town and the accustomed seclusion of domestic retirement delight him no longer; and he hurries off to the capital of the *beau monde* with his youthful and elegant bride. This marriage, which comes upon us so abruptly, produced a total revolution in Hahnemann's habits and tastes. In Paris, we find him entertaining company and accepting invitations; frequenting the opera, and partaking moderately of the dissipations of the gay capital, and no longer confining his medical practice to the consultations at his own house, but visiting patients at their residences, like any other practitioner, which he had not done in Germany for more than twenty years previously. He seems to have entered on this novel course of life with great zest."

We have, however, M. Pechier's testimony to the fact that Hahnemann had at first desired to remain inconspicuous in Paris, for which purpose he had taken such precautions that his most faithful Parisian disciples, those who would have esteemed it the highest pleasure to have welcomed him, were ignorant of his arrival for a fortnight or more. "He selected a residence out of the way; he made no visits; he even denied himself his wonted and necessary exercise. But a renown, like his, traverses distance and penetrates walls. In brief time his dwelling became known, and his portal, as in Germany, was besieged by multitudes who esteem health as the first of blessings. From this moment Hahnemann was forced to take an active part in the propagation of Homœopathy. Complimented at once

by Royal grant, 'with the full privileges of medical practice, he formed the great consulting fountain of Europe." It was truly against his will, therefore, that the revolution in his habits, spoken of above, was produced. This change, however, did not interfere with the one purpose of his life. He found time to make extensive and important alterations in his *Chronic Diseases*, of which he brought out a second edition.

After an eight years' residence at Paris, he died on the 2nd July 1843, at the 89th year of his age. Just before his death, his wife whispered to him by way of comfort, "Surely some mitigation of suffering is due to you, who have alleviated the sufferings of so many." To this the dying sage replied, "Every man on earth works as God gives him strength, and needs from man with a corresponding reward; but no man has a claim at the judgment seat of God. God owes me nothing; I owe him much, yea all."

Thus closed a life that was much longer than the span of ordinary mortal existence, extending from the latter half of the last to the first half of the present century; a life that was full of vicissitudes and struggles and triumphs of the most remarkable description; a life that was devoted uninterruptedly to the most difficult and gigantic work ever undertaken, that of establishing the science of medicine on the eternal foundation of positive fact and natural law, which necessarily involved the demolition of the time-honored, specious, but delusive fabric of speculative medicine which had endured for 3000 years,—devoted, in a word, to the service of humanity in one of its most important aspects, with a zeal, perseverance, energy, love of truth and success which have not been equalled and are not likely to be equalled for a long time to come. Judged by its magnitude and importance, his discovery has been the most glorious and beneficent that has yet been made, and his name will stand as the greatest in medicine. For whatever developments the science will attain in the future, they will all be in the direction he has pointed out. Whatever be the fate of some of

the extreme minutiae of his system, the cardinal doctrines of the necessity of provings in health, of the homœopathic remedy, of the single remedy, and of the minute dose of the homœopathically selected remedy, will remain the main pillars upon which the science and art of healing by drugs will rest.

So long as gratitude does not become extinct in the human heart mankind will cherish the memory of Hahnemann as that of one of the greatest benefactors of the race. Nowhere in the world as in our own dear fatherland, is merit so justly appreciated and benefits so warmly and gratefully remembered. Indeed, I may say, her trait in this respect verges on a weakness. Our country makes no distinction of race, color or creed. It was from India that the duty of embracing the whole creation in the arms of universal benevolence was preached. It is meet, therefore, that in India the name of Hahnemann should be revered, and his memory cherished as that of the Founder of the Positive Science of Medicine. I do not for a moment wish you to imitate him in all that he said and did. My prefatory words must have told you that this is far from my wish. Indeed, gentlemen, I believe that if with the vigour and sagacity of his mighty genius, Hahnemann had retained the sobriety and modesty of the philosopher that he so eminently displayed in his early years, much of the acrimony and prejudice and opposition of the profession directed against him and his system would have ceased to be. His example ought to stand as a lesson and a warning to future discoverers as to how they promulgate their discoveries. Great is truth, indeed, and will prevail; but we must not forget that truth has to be presented to mortal men, with passions and prejudices and weaknesses inherent in their very organization; and we must not also forget that no one has the monopoly of all truth.

And now, Gentlemen, again thanking you most sincerely for the very great honor you have done me, I beg to resume my seat.

## CLINICAL RECORD.

*Cases of Purulent Conjunctivitis in new born Children.*

UNDER CARE OF BABU AKHIL NATH PAL, L.M.S.

*Case 1.* N, aged 6 days, came under my treatment in July last. Both eyes were affected, the eye lids, specially the upper ones, were greatly swollen, the conjunctiva of either eye was of an uniform scarlet color, it was chemosed and it slightly overlapped the corneal margin. On everting the lids profuse purulent discharge gushed out of the eyes. No fever, appetite good, bowels regular, cannot open the eyes, cries when the eyes are washed.

*Treatment.* Bell. 6, gles., every 4 hours, was continued for two days, but there was no improvement, rather the swelling of the lids increased.

The skin of both the lids was painted with a solution of *Arg. nitras*, ten grains to an ounce of distilled water, morning and evening, and *Arg. ni.* 6 was given internally thrice daily.

Both the eyes were ordered to be washed with tepid water every 3 hours; cream of milk to be applied to the lids during night to prevent their agglutination. With this sort of treatment which was continued for two days, the swelling of the eyelids subsided; the painting the lids with the nitrate of silver solution was discontinued, and *Arg. nit.* was continued internally as before. With this simple procedure the child's eyes were cured after a fortnight.

*Case 2.* This child was affected with ophthalmia of the left eye on the 6th day of birth. I was called on the 4th day from the onset of the disease, and noticed the following: left eye affected, both eyelids swollen, profuse purulent discharge from the eye, morning agglutination, conjunctiva deeply injected, haziness at the corneal margin, intolerance of light.

*Treatment* *Arg. nit.* 6 thrice daily, eye to be washed with tepid water every 3 hours. This sort of treatment was continued for 3 days with very little perceptible improvement, and therefore an external application of *Arg. nit.*  $\frac{1}{2}$  gr. to an ounce of water was ordered to be dropped into the eye after the washing. The patient got well within a week.

## THERAPEUTICS OF CONSTIPATION, DIARRHŒA, DYSENTERY, AND CHOLERA.

### 82. DIOSCOREA.

#### Constipation :

1. Large and difficult st., with straining.
2. Very hard, dry, lumpy st., followed by prolapsus of the anus, with great pain and distress in the hæmorrhoids
3. St., first part black, very dry and hard ; last part mushy and white. Black, dry, lumpy st.
4. Small st., with much straining and shuddering.
5. Dark, bilious, slightly costive st.

#### Diarrhœa :

1. Urgent desire for st., driving me out of bed, with small bilious sts., and pain in the bowels during st., in the morning
2. Urgent desire for st., with sharp cutting pain in the umbilical region, extending to the rectum, with shuddering during st., and chilliness after st
3. While urinating sudden desire for st., with loose st
4. Hurried desire for st driving out of bed in the morning ; loose mushy st. and later on soft, dark st. (Relieved by *Ver. a. 2.*)
5. Dark, offensive sts. Offensive, bilious sts.
6. Very profuse, thin, yellow st., that did not relieve the pain in the bowels.
7. Small soft st., constant sensation in rectum, as though must go to st. at once, disappearing for a few minutes after st., but soon returning.
8. Soft yellow mushy st., followed by a very weak faint feeling.
9. Dreadfully offensive st., causing a faint sensation, relieved in open air.
10. Watery st., with shuddering but no pain.
11. Sts., light-colored, almost white and slimy.
12. Almost irresistible desire for st. while eating breakfast and dinner ; small, dark, offensive sts., with much flatulence.
13. Loose st., with straining and slight protrusion of the old hæmorrhoidal tumour, followed by pain in both knees ; worse on going upstairs, the right one worse.
14. Twisting pain in all parts of the bowels, worse in lower part, constantly changing, relieved by passing soft yellow st.

#### Dysentery :

1. Loose slimy st., with straining and pain in the rectum.
2. Slimy st., each one smaller than the preceding one, but more slimy, and more straining, with less pain before but more pain after st.
3. White slimy st., like the white of an egg, but lumpy, with great unavoidable straining and burning in rectum, with a sensation as if the fæces were hot.
4. Soft, slimy, light colored st.

5. White slimy st., with pain and straining, followed by a dragging pain below left axilla.

6. Dark, slimy, offensive st.

**Aggravation :**

1. Morning and forenoon.

2. While eating breakfast and dinner.

3. While urinating.

4. Sitting, lying or doubling up. (Colic.)

**Before St :**

1. Urgent desire driving out of bed early in the morning.

2. Pain in the bowels.

3. Colic.

**During St :**

1. Pain in the bowels.

2. Shuddering.

3. Straining and burning in the rectum.

4. Pain and protrusion of the hæmorrhoids.

5. Bearing down prolapsed feeling in the anus.

6. Ineffectual desire for st.

7. Inclination to st., and itching of rectum.

8. Emission of offensive flatus.

9. Faintness, bordering on syncope.

**After St :**

1. Chilliness.

2. Pain in the bowels.

3. Straining.

4. Weak, faint feeling.

5. Dragging pain below left axilla.

6. Prolapsus of the anus.

7. Colic.

**Rectum and Anus :**

1. Aching, pulling, twisting, darting, pricking or dull pain in the rectum.

2. Itching of rectum.

3. Moisture around the anus.

4. Involuntary discharge (oozing) of mucus from the anus.

5. Hæmorrhoidal tumor sore and itching.

**General Symptoms :**

1. Desire to be alone ; conversation troublesome ; society, even of ladies of which he was fond, is disagreeable.

2. Call things by wrong names ; dull and stupid in the afternoon ; well, forenoon.

3. Vertigo and giddiness accompanied by rumbling of bowels.

4. Dull, squeezing pain in both temples, with nausea and chills, and mouth dry, but no thirst.

5. Tongue coated white, yellowish-white or brown.

6. Tongue sticks to the roof of the mouth.

7. Mouth dry, slimy, bitter, sore, clammy or bloody.

8. Saliva increased, runs out of the mouth during sleep.

9. Taste sweet, flat or pappy, bitter, bloody; with disgust for food.
10. Constant desire to swallow, but swallowing causes nausea.
11. Eructation of sour, bitter or tasteless wind or wind tasting of rotten eggs.
12. Belching of sour water.
13. Acid stomach with burning extending to the throat and roof of the mouth.
14. Hiccough, with simultaneous, involuntary discharge of flatulence from the bowels, with shuddering, after a light supper.
15. Nausea, extending from throat to stomach.
16. Distress at stomach, had to unfasten clothes.
17. Distressing pain at epigastrium, relieved by sour, bitter eructations.
18. Sharp cramping pain at the pit of stomach, followed by raising, belching, and gulping enormous quantities of tasteless wind, followed by hiccough and discharge of flatulence.
19. Sharp pain at epigastrium, aggravated by stooping, relieved by standing erect and eating.
20. Sharp pain in left hypochondrium, preventing walking and deep inspiration.
21. Dull heavy grinding pain in the region of the liver.
22. Hard dull pain in region of gall bladder.
23. Constant distress in the umbilical and hypogastric regions, with severe cutting, colic-like pains, every few minutes, in stomach and small intestines.
24. Rumbling of bowels, and passing large quantities of offensive flatulence.
25. Discharge of offensive flatulence with urgent desire for st.
26. Sensation as if diarrhoea would come on.
27. Colic came on in regular paroxysms, each lasting only a few moments.
28. Sharp cutting pain in bowels aggravated by walking.
29. Gripping pain at hypogastrium, as if diarrhoea would come on, entirely relieved by passing small quantities of flatulence.
30. Sharp pain in hypogastrium, relieved by discharge of flatulence, followed by urgent desire for st., driving out of bed at 4 A. M.
31. Cramping pain in stomach, bowels, arms, and legs.
32. Nails on fingers and toes seem unusually brittle.
33. Dull aching pains in wrists, hands, and fingers, ankles, feet and toes; they are feeling quite stiff.
34. Trembling with faint feeling at stomach.
35. Frequent sharp pains darting from one part of the body to another.
36. Restless night, feeling languid unrefreshed.
37. Strong smelling perspiration of the genital organs; constant excitement, with strong and frequent erections day and

night; and amorous dreams with emission. (Primary effect.)

38. Genital organs cold, relaxed, and almost insensible; no erections; desire diminished or absent; emissions in sleep *without* erections. (Secondary effect.)

**Remarks:** Having regard to the characters of the stools and concomitant symptoms **dioscorea** may be used with advantage in constipation. The chief use of the drug, however, is in diarrhœa and in dysentery consisting of mucous stools *without* blood. The stools are yellow, bilious, or pale, almost white, and generally very offensive. They come on chiefly early in the morning, driving the patient out of bed, in this respect resembling the stools of **sulph.** The great indication for **diosc.** is the association of the characteristic colic with the stools. Both eclectic and homœopathic physicians, who have extensively used the drug, describe the colic as a "constant pain, aggravated at regular intervals by paroxysms of intense suffering;" the pain, according to Dr. Hehnuth, is more continuous than that to which *colocynthis* homœopathic. "The pain," says Dr. Hale, "is located at first in the centre of, but is gradually diffused all over, the abdomen, attended by vomiting, retching, furred tongue, distended and sensitive bowels, &c." "Now it is evident," continues he, "that no one distinct *disease* is here represented but a definite disturbance of the abdominal nervous system, commencing at a given point (the umbilicus) and radiating all over the abdomen, extending to the stomach, uterus, bladder, and even to the extremities, and affecting both the *nerves of sensation and motion, causing pain and spasm*" Whitlow and a tendency thereto are further indications for **diosc.** The symptoms of the sexual system will also furnish indications for the drug.

### Acknowledgment.

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*Taking Cold Its Nature, Causes, Prevention and Cure.* By John Hayward, M.D. Seventh Edition. E. Gould & Son. London. 1887.

Excerpts from Contemporary Literature.

\* MY CONTRIBUTION TOWARD THE SOLUTION  
OF THE POTENCY-QUESTION. \*

If for some fifteen years I have not by a single word taken part in the discussion of the especial efficacy of the lower or higher attenuations, my silence was by no means caused by a lessened interest in the solution of this important question. On the contrary, I may say that I have never ceased to study the question, and that I have eagerly read and considered the various publications bearing upon the question in hand. Even in conversation with professional acquaintances or with strangers I have taken pains to touch this point and to get their views, reasons, and clinical experience. If I have then avoided to give my opinions on the matter of dosage, in spite of various attempts to provoke me, it was in obedience to a purpose formed years ago, and which with time grew firmer. Soon after I entered upon my literary activity, the discussion concerning dosage was raging in the most violent manner, and as a natural result I, who had just assumed the critical department (book-reviews, etc.) of the new "Archives," was drawn into the fight. I considered it my duty to speak my mind freely, and to maintain my ground honestly and frankly; being young and sensitive at that time, it is likely I did little to cultivate moderation and to ignore personalities. But it required no particular thoughtfulness to see that such a discussion could produce no results desirable or profitable to homœopathy, even if only because, in addition to purely personal affairs, the reasons were *a priori* and theoretical, while little attention was given to a candid, cautious weighing of facts, or, to say the least, everybody seemed determined to serve-up, in the smallest possible space of time, the largest possible amount of so-called experiences. On this account I withdrew before long, and soon, upon the occasion of the foundation of the "Quarterly," publicly announced my determination to close the pages of the journal to such unprofitable matter. After fifteen years I can safely assert that I have acted upon this announcement, except in cases when speech could not be avoided. And I need not now state that I have no desire to revive the old quarrel by the publication of this paper. Persons who are willing to go to the trouble of reading it, will admit that I cannot offend anyone, no matter how sensitive and argumentative, by a mere statement of the experience gathered in a practice covering more than twenty years. I considered this, and do now consider it, the only way in which we may ever arrive at a satisfactory settlement of dosage, but must express the hope that my example will be followed by many, for the experience of the single individual, unsatisfactory and incomplete as it is likely to be, is measured in value by the confidence and dependence which may be placed upon the individual. Under all circumstances, I think it a duty which every homœopath owes to the profession at certain times to draw-up a summary of his success, and to lay it upon the common altar, a last offering of gratitude on his part which may be made useful in the solution of difficult questions. In this light do I wish to have this essay considered, and especially so since I am not able to modify it in any particular, and am as unconcerned and silent concerning any points of criticism which may be offered as are the dead concerning their last will and testament.

\* Free translation of a paper by Dr. Clotar Mueller, first published, several years ago, in the "Hom. Vierteljahrsschrift."

In the following I shall then give, simply and without comment, those doses which, from their effects, seem to me worthy of particular preference, and of those remedies in the case of which I have had from their frequent use experience worth mentioning.

I will again repeat that these statements are of especial significance and of sufficient importance to form conclusions only to myself, and are not advanced to nullify or contradict the conclusions of others. It is desirable that others who have a different, and perhaps opposite, experience shall publish it. These will not negate or contradict each other, but, on the contrary, will, up to a certain point, supplement and verify each other. Under no circumstances can such a publication and comparison of these special experiences place the matter of dosage in a more unsatisfactory position than it has held so far. To be sure, I find myself in unqualified opposition with a certain portion—fortunately not large—of my colleagues who in all sincerity maintain that “a question of dosage exists only for the ignorant, but not for those who are intimately acquainted with nature’s own law of dosage,” (Dr. Stern in *Allg. Hom. Zeitg.*, vol. 69, “Reflection concerning the matter of Dosage”) although I have not the slightest hesitancy in permitting myself at once to be classed with the “ignorant” persons mentioned. But what will they say if I maintain that the question of dosage is far from a satisfactory solution, and cannot be settled after such a fashion, but am forced to assert as the result of my own experience that several remedies deserve a preference in very heavy, others in very attenuated, doses; yes, the same remedy now in a heavy, then in a weak, dose according to the nature of the case to be treated. I must leave it to those wiseacres to solve in some way this difficulty (contradiction) or to throw aside my experience as an inconvenient thing on one void of importance. At present I merely care to give the results of my practice, and to invite the attention and study of those who, like myself, desire to gradually clear-up and settle the question of dose from a basis of positive facts rather than of idle discussion or arrogation.

In fact, not only do I use exceptional, single remedies, as certain of the so-called anti-psorics, in the 30th attenuation, and others in the 1st or 3rd, but I even prescribe certain medicines now low, then high, so that for instance in the polyclinic many an assistant has heard me order Sulphur in the strong mother-tincture, and soon after in the 30th attenuation, much to his surprise. I need hardly state that I did not thus prescribe as a matter of caprice, or in obedience to a preconceived theory, but wholly from experience and observation, from which I gradually derived certain rules and principles. I purposely and deliberately obeyed actual experience, because from the beginning I felt sure that experience alone can solve the question of the dose. Not even the proposition, both warmly supported and hotly contested, that in acute illness the lower, and in chronic affections the higher, attenuation should be used, was allowed to guide me, and I am bound to confess that my own experience has not led me to unreservedly accept this teaching, even though in isolated cases it seems to hold good.—Still less readily could I trust those who from the start rely upon those who implicitly consider the material doses the best, or much less those who insist upon employing only high or infinitesimal potencies, and recognize in their exclusive use the very essence of homoeopathy. Consequently, I formed no preference for either view, and gave both high and low attenuations, the former at first only when no danger was incurred by delay and experimentation was not objectionable. Generally I selected cases which, on account of their frequency and the uniformity of their symptoms, were well adapted for comparison and to the study of the effects of the various attenuations. In so doing two facts soon became evident which for my future experiments furnished me a

more stable basis and a certain system. First, I soon became convinced that certain remedies act more reliably and much more powerfully in material doses than in high attenuations, while others again develop in highly attenuated doses a more general and more profound effect which they do not possess unless attenuated (potentized). This accorded with the experiences of several others, and simply in repeated individual cases verified a general statement. The second observation seemed even more remarkable, although not new by any means. Almost constantly I saw absolute proof in the case of certain remedies that in large doses they develop a much more specific and more vigorous curative action when given in certain pathological conditions and organic affections, than in the high attenuations, which, however, seem far more effective in the treatment of certain other affections. And this directly reverse action of the different potencies did not by any means depend upon the acuteness or chronicity of the diseases treated. On the contrary, it seems to me I must come to the conclusion that the one point of importance lies in the particular preponderance or in the primary affection of this or that organ or system. For instance, *Rhus tox.*, in sprains, etc., acted best in the first in affections of the skin in the 6th attenuation; *Nux vom.*, in affections of the stomach and in constipation gave the best results when administered low, in affections of the heart when given very high. The difference seemed to be that in one case the spine, stomach, and intestines, in the other the skin and *nervus vagus* were idiopathically affected. However, I can affirm that at first I was not influenced by any such view or theory, but that the growth of a certain system in the use of high or low attenuations was the slow result of the repeated appearance of conditions already mentioned. At first the matter was one of mere experimentation.

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The key which shall explain this difference of effect of the different potencies in varying pathological conditions must be sought and found in our materia medica. It is reasonable that symptoms which always appeared in all or in many provers, or very soon after taking the drug, or very clearly and intensely, or after taking very heavy doses, can be cured more promptly by certain doses than symptoms which have been observed rarely, or were transitory in their nature, or appeared only after taking infinitesimals. A specific and thorough knowledge of our provings and of the power of our remedies can alone give us the solution and furnish *a priori* fixed rules. Until these are had, we must be satisfied in the individual case to cling to clinical experience, and to leave the settlement of the question of dose to actual and careful experimentation.

Finally, I must be permitted to make one observation which, though not bearing directly upon the subject in hand, forms part of the chapter on the question of dose. It seems to me of the highest psychological interest to occasionally call attention to the effect evidently produced by the exclusive use of so-called "high potencies" upon the mind and intellect of the homoeopaths who use them. It cannot have escaped the observation of those who have kept track of our literature that throughout all the contributions from the admirers of infinitesimals there runs, like a red line, a peculiar self-laudation and self-appreciation which boldly takes, if granted, as a matter of course, that the genuine homoeopaths and, above all, the profound students of our materia medica can be found only among the high-potency men. It is taken for granted that nothing short of a very exhaustive knowledge of materia medica, or a sort of inborn intuition, qualifies one for the use of high potencies; the poor fellow who lacks these must be content with the lower attenuations, which are not beyond the capacity of the common doctor and apprentice in the healing-art, and which they can use with tolerable satisfaction, even though they, as a

matter of course, cannot compare with their betters. Especially are these favored ones in the possession of the secret of the "true simile," which has nothing in common with the capacity or the aims of the common herd. This possession of the "true simile" is the one qualification for those "symptomatic cures" which form the most exalted triumph of art for every "genuine" homœopath, although to the initiated they appear like nothing more than the digging-out of one or two peculiar, usually unimportant and purely accidental, symptoms. This exclusive use of high potencies gives under all circumstances the privileges and the distinction of a genuine disciple of Hahnemann and of homœopathy, even though he may use drugs that have never been proved, or alternate or mix remedies, thus violating directly all the cardinal principles of homœopathy.

**ACONITE.**—From this remedy, which I frequently prescribe, I have in many cases observed a special adaptation to acute affections, and although I am not able to call into question the efficacy of its high attenuations, my own experience points directly to its particular usefulness in heavy doses. In a purely feverish condition, in acute catarrhs, in certain inflammations, in croup, etc., I have for years given it in the 1st to the 3rd. In acute rheumatism, if indicated, I use it with brilliant success in doses of one to three drops of the mother-tincture. Only in cases characterized by a so-called nervous excitement, as for instance, with a certain sleeplessness or after violent mental excitement, also in purely chronic difficulties, as in tongue-troubles, I have found that the 6th or 9th dilution is quite sufficient, perhaps preferable.

**ALUMINA,** in the 30th attenuation, I have often prescribed, the indications being present, for appropriate affections of the spinal marrow, but always without success; the 3d trit. was used with no better result.

**AMMONIUM CARB.** 2d and 3d trit., I have used a number of times, and with appreciable effect, in certain types of catarrh, dyspnoea, and asthma. Higher attenuations were used more rarely in such cases, but always without success.

**ANTIMON. TART.**—As the result of many years of trial, I use it only in the 2d or 3d trit., and my judgment in the matter is often crowned with decided success.

**APIS.**—My fairly extensive experience have not made me one of those enthusiasts who see in this remedy the most precious addition to our therapia. Still, I must admit that in a few cases I have had marked and even unusual results from it. Especially was this true in a case of poisoning from malignant pustule, in which Apis 3d saved the patient, correcting the malignant tendency of the affection, as well as in several grave affections of the eye, most of them scrofulous, in which Apis from the 6th to the 30th did nicely.

**ARGENT. NITR.,** 3d trit., upon several occasions showed positive effects in certain kinds of gastric difficulties and in headaches.

**ARNICA.**—Aside from its external use in the tincture, I have seen full effects from the internal administration of the 3d and 6th attenuation.

**ARSENICUM.**—This remedy belongs to those which I order in both low and high attenuations, according to a fixed plan, as I deem demanded by the conditions for which I desire to use it. In lupus, carcinoma, psoriasis, rupia, impetigo, intermittent fever, ulcers on the feet, I use it in very heavy doses, as in the 1st and 2d trit., and with the most extraordinary, almost infallible, action. The most stubborn cases of lupus, which had defied all treatment, I have cured fully and permanently without ever noticing a single untoward symptom as a concomitant or a sequel. If I prescribe arsenic in dropsy, catarrh of stomach or intestine, phthisis, I usually give it in the 6th attenuation, and mostly with as good success as

can be expected in this class of cases ; and actual test has shown me often enough in those cases of dropsy in which the 6th dilution has no effect, nothing is to be gained by the exhibition of a lower dilution. Still higher, i. e., in the 30th, I employ this remedy in asthma, angina pectoris, chronic inflammations of the eyelids, and believe that often I have had good results follow.

**AURUM.**—From aurum muriat., 2d and 3d trit., I have several times seen unmistakable effects in ozæna, caries, and syphilitic bone-affecti<sup>o</sup>ns, and once or twice in ascites from the 1st. On the other hand, so far I have not in a single case had positive results from higher attenuations or from other preparations of this agent.

**BARYTA MURIAT.**—In the same manner I have seen several times results from 2d and 3d trit. of baryta mur. in swellings of the glands of the neck and throat, but never from higher attenuations or other preparations.

**BELLADONNA.**—This is the one remedy with which I have had the most positive and unquestionable effects and the most brilliant cures, and this in large doses of the lower attenuations. In certain cases of neuralgia, migraine, whooping-cough, inflammations (especially anginas, phlebitis, ophthalmias, peritonitis and oophoritis), biliary and vesical calculi, gastric inflammations and rheumatism, I give almost always doses of one-fourth to one drop of the 1st or 2d attenuation, and under peculiar circumstances of the mother-tincture, followed by immediate improvement and cure, not temporary palliation, and without any untoward symptoms. In certain cases I use belladonna in the 30th attenuation ; they are non-inflammatory cases of photophobia and migraine in exceedingly sensitive persons and experimentally in cases of facial acne and copper-redness of the face and nose, because here other remedies and other doses have never accomplished anything, and belladonna, in a few exceptional cases, seemed to yield effects.

**BISMUTHUM**, according to my experience, acts only in heavy doses, as in the crude or first dec. trit ; even in the 3d or 6th it seems inert ; on this account I have never used the 30th.

**BORAX.**—From this remedy I have repeatedly had prompt response when using it in the 6th attenuation for aphthæ and stomatitis ; however, it is difficult in this class of cases to judge of curative effects.

**BRYONIA** has always proved more and more active as I gave it lower and lower. I use it, if possible, in the 1st attenuation in rheumatism and pleuritis, but not unfrequently in the 3rd and 6th in catarrhs and gastric troubles.

**CALCAREA ACETICA**, 1st and 2d trit., has never failed to act like a charm in characteristic types of intestinal catarrh, gastric troubles and headaches. This action is so apparent that in the earlier years I only rarely, and of late years never, tried the higher attenuations, and then in vain. *Calcareæ carbonica* I often use in the 6th and 30th attenuation, in the latter particularly in cystic tumors or atheroma, glandular enlargements, scrofulosis, affections of the bones, etc., in fact where organic shortcomings and malnutrition are to be removed. The difficulty of noting cures and positive action depends upon the nature of these difficulties ; yet, I must insist that occasionally a decided effect was produced.

**CANNABIS** seems to act more strongly and more surely in large doses (1st dil. or mother-tincture) than in the 3d, 6th, or even 30th attenuations ; yet, the action of this remedy is correspondingly limited and uncertain.

**CANTHARIDES**, on the other hand, in the 3d or 6th attenuation, has very frequently shown prompt effects in appropriate cases of strangury, dysuria, chordee, cystitis, and urethritis.

**CARBO AN.**—I have used too rarely to come to a satisfactory conclusion, but in cases of bubo the 2d trit. seemed to scatter the swelling. *Carbo veg.*,

however, in the 3d trit. and in the 6th attenuation, gave excellent and permanent effects in varicosities of the lower thigh and in chronic gastric affections. I use this remedy occasionally in the 30th attenuation with some success in facial acne and in other characteristic exanthems.

**CHAMOMILLA.**—I prescribe usually in the 6th, more rarely in the 3d, in diarrhoeas of children, in toothache and in gastric troubles. The curative action was unmistakable only in exceptional cases. Of

**CHINA**, strange though it may seem, I have seen but limited curative action, though I have tried it from the 3d to the 30th. Of late I have in several instances used the 1st attenuation with good results in chlorosis. **Chininum sulphur.**, 1st trit., has shown its usefulness in those cases, if intermittent, to which it is homœopathic. My experience with

**CAUSTICUM** has been unsatisfactory, perhaps because I only use it rarely, and then most frequently in the 30th attenuation, owing to my lack of knowledge of the remedy.

**CINA**, in the 3d and 6th attenuation, has done well for me, particularly in intermittents, in gastric affections, and in worm troubles.

**CINNABARIS**, as my experience has abundantly shown, in the 2d or 3d trit., acts well in syphilis; of late, however, I have used it less readily since in the average case the red precipitate acts much more promptly and is more reliable. Now I only use it in complicated cases (scrofulosis and previous mercurialization).

**COCCULUS.**—To this remedy I owe but a small number of positive cures, although I have not used it often, and then in the 6th to the 30th attenuation.

**COFFEA.**—It has been somewhat similar with *coffea*; only in exceptional cases have I seen unmistakable effects from it in migraine, sleeplessness, etc., but never a positive cure. The reason for this may be the possibility that our present generation of coffee-consumers require something more tangible than the 6th or 30th, the dilution which I have always used. This belief is the stronger, since of late I have seen brilliant effects from strong coffee in a few cases of asthma, migraine, and indigestion.

**COLCHICUM** I use in rheumatism in the 1st dil. or tincture since I have seen from it much better results than from higher attenuations; in kidney-affections, post-scarlatinal dropsy, and difficulties of the bowels the 3d dil. seems to me sufficient. With

**COLOCYNTHIS**, in spite of many trials, I have not yet made noteworthy cures. I usually gave it in the 3d or 6th attenuations, rarely in the 30th.

**CONIUM**, in the 3d or 6th attenuation, has proved itself pretty efficient in whooping-cough, and with the 30th attenuation I have several times had good success in the treatment of photophobia and maculæ cornæ, also in aching and maculæ on the legs as from ecchymosis.

**CUPRUM** belongs to those remedies of which I have so far seen no cures, or at least very meagre curative action, whether I give it in the 3d or 30th. Partly this may be due to my not using it often enough or not with sufficient skill.

**DIGITALIS.**—With this I have fared no better. I have never seen particular effects or cures from this remedy used homœopathically, in the 1st, 3d, 6th or 30th attenuations, and only transient but uniform diuretic effects from the infusion.

**DROSERIA** I now use exclusively in the 1st attenuation in cases of whooping-cough and in laryngeal troubles, after vainly using the higher attenuations. I do not know of any cures made by it.

**DULCAMARA.**—I might here repeat my remarks on *Cuprum*. The insufficient proving is an important item.

**EUPHRASIA.**—From the 6th or 3d attenuation of this remedy I have often had good effects in catarrhal ophthalmias. Formerly I used it locally,

6 to 10 drops of the mother-tincture to 1 oz. of water, but never saw much good from it.

**FERRUM MURIAT.**—I use in 1x dil. in chlorosis (though rarely, because iron is homœopathic to only a few cases); in rheumatism, phthisis, paralysis, etc., I gave the 2d or 3d dil. In certain condylomatous growths I use the tincture locally.

**FILIX** I use in the 1st or 6th dil. in treatment of *æmia*, often with considerable success, at least temporary. In spite of Hahnemann's statements, the 30th has proved useless. Actual death and expulsion of the worm I have only seen in exceptional cases from small doses of the 1st or 6th.

**GRAPHITES** is one of the few remedies which in the 2d or 3d trit. have never done anything for me, in spite of former and frequent use in exanthems and in laryngeal affections. On the other hand, I think I have several times seen decided effects from the use of the 30th attenuation in hydrocele and in chronic affections of the skin.

**HEPAR-SULPH.**—I use it in the 1st, 2d, 3d trit., and have reason to feel perfectly satisfied with its effects in catarrh, croup, glandular affections and exanthems.

**HYOSCYAMUS** in the 1st attenuation acts very nicely in certain types of cough; in cases in which actual cure is out of question, as in the late stages of laryngeal or pulmonary phthisis, I even order it in the tincture, half drop to a drop, with evident success. In spasms, affections of the brain and mind, I use it in the 3d, 6th, and even 30th attenuations.

**IGNATIA** I use in epilepsy and kindred diseases in the 3d or 30th with a measure of success which, of course, can be called positive only in exceptional cases. In acute troubles, particularly in attacks resulting from violent mental emotion, I use the 3d or 6th, and here it is even more difficult to determine the success.

**IODUM** I now only use in the lower dilutions, in gastric difficulties and glandular affections, usually in the 1st dil. Kali hydriod. I employ in the first or second, giving one to two grains of the crude at a dose in syphilis.

**IPECACUANHA**, according to my observation, accomplishes all it is capable of doing in the 1st or 3d dil.

**KALI CARBON.**—So long as I used this remedy in the 6th or 30th, I saw little or no good from it; but since I have followed Dr. Gruber's advice, giving it on the 1st and 2d, I have had better results from it, especially in pulmonary tuberculosis. I have had exactly the same experience with Kali nitricum, which in the 1st or 2d I must now hold to be an excellent remedy in the same condition.

**KREASOTUM**, is one of the class (Cupr., Dig.) which have at no time, and in no form, shown to me positive and uniform effects; under its exhibition several morbid manifestations improved, but I could not feel sure that this effect was due to Kreasotum, because it did nothing at all in similar cases, and whatever of curative action might be claimed, the presumable improvement or cure was always tedious, fitful and unreliable. Of

**LACHESIS**, used chiefly in the 6th, also in the 30th attenuations, I have seen little or no effect. I am uncertain whether this is due to the material or my ignorance of the individuality of the agent. As a result, I have for years used it with hesitancy, and in such cases only in which I felt myself helpless.

**LAUROCERASUS** I have often seen produce very desirable effects in certain cardiac troubles, vertigo, dyspnoea, and congestions, when given in the 3d or 6th dil. My experience, however, with it, especially in the higher attenuations (30th) is insufficient.

**LENUM**, in the 3d or 6th, I consider a pretty reliable remedy in certain rheumatic affections, especially of the back and knee. Of

**LYCOPodium**, which, taking everything into consideration, I hardly know how to fully utilize, I have noticed only isolated effects, and from the 30th attenuation, especially in chronic exanthems, and once in sycosis. I do not remember ever having seen anything from the use of the 3d trit., that shows affinity for urinary organs and exanthems.

**MAGNESIA MUR. OR CARB.**—Of these I can report nothing.

**MANGANUM ACET.** I have almost always used this in the 2d or 3d trit., but must acknowledge that the remedy has not made good my expectations. Thus, in affections of the larynx and in deafness, in the treatment of which the provings promise much, I have seen improvement or cure in exceptional cases only, and even then not positively established, although I have used it often. The small number of cases fit for experimentation prevented my attempting to verify this in the 30th.

**MERCURIUS**, on the other hand, belongs to those remedies to which I am indebted for my best and most frequent success in the treatment of the sick; I vary from the 1x trit. to the 6th, and this in accordance with well-defined indications and circumstances. Thus in syphilis I use the low triturations, the 3d in primary, simple chancre, the 2x or even 1x in syphilis and in syphilitic chancre. This preference for the heavier doses is the result of direct and numerous trials. In the treatment of toothache, anginas, paratritum, catarrhs, suppuration of glands, ulcers on the foot, ophthalmia, I use the 2d or 3d, the 6th when the affections are chronic. My choice between the different mercurial preparations depends also upon indications drawn from clinical experience. Thus in inflammatory conditions of the inner organs, in toothache, catarrh, the *mercurius solubilis* Hahn. is nearly always sufficient; in syphilis I prefer the red precipitate, save in ulceration of the mouth and fauces, in which I prefer the mere. sublimate,—I also use the sublimate in abscess of feet and in dysentery; in diarrhoea and salivation I prefer calomel, and in syphilitic affections the bismuthide.

**MEZEREUM**, I use in 30th attenuation in treating affections of the bone and certain exanthems, because I fancy I have seen better results from it than in the lower dilutions, although in a general way they were not brilliant. In conditions which present as objective symptoms more violently painful sensations, I prefer the 3d or 6th attenuation.

**MURIATIC ACID** I use in 1x and 2x in typhoid conditions; I have no clinical experience concerning the effect of the higher attenuations.

**NATRUM SULPHURICUM** I have of late frequently used in leucorrhœa, employing the 3d attenuation, and several times with excellent success.

**NITRIC ACID** belongs to the remedies, which in my hands have not yielded marked results; especially problematical seems to me its use in syphilis, although I have tried it often enough in the 3d, 6th, and 30th.

**NUX MOSCHATA** has seemed several times to yield excellent results in chronic gastric affections, and in spasmodic and hysterical difficulties based upon hysteria, the remedy being used in the 6th attenuation, but my experience is not sufficiently large to speak with authority.

**NUX VOMICA.**—This polychrest, to which I am indebted for many a cure, I use most frequently in the 3d to 6th attenuation, especially in the various gastric affections. And it has been shown me beyond doubt, by repeated experience, that the 3d and even the 1st dilution is preferable whenever constipation is present and its removal seems of particular importance. I also give usually the 3d to 6th attenuations in proper cases of headache and toothache, from bilious troubles, catarrh, intermittent, etc. There is, however, a well-defined type of affections in which I prefer the 30th; I refer to the paroxysms of asthma coming on at night, heart-affections of nervous origin, and hysterical and hypochondriacal troubles purely functional.

**OPIMUM.**—I have used too rarely to speak of it positively, but I think I have several times seen good results from the 3d dilution in the constipa-

tion of children. *Morphia* I have seen used except. antipathically, and I have observed that, when properly employed, the full effects could be had from 1-16 to 1-10 grain doses, a subsequent increase of dose not increasing the effect. In some persons it does not act at all, or does so in an erratic, confusing manner.

*PETROSELINUM*.—The effect of this agent in gonorrhœa was absolutely nil, given through the entire scale from the 6th to the 30th; there is no preference for any dose.

*PHOSPHORUS* is a remedy with which I have performed many of my most beautiful cures, and concerning whose remarkable effects I, for one, have ceased to possess doubts. I give it almost exclusively in heavy doses, in the 6th, 3d, or even first dilution. Of the latter dose I have seen most remarkable cures in desperate cases of bronchitis infantum and in pneumonia. In diarrhœa, gastritis, bleeding, purpura hæmorrhagica. I usually give the 3d dilution, while the 6th answers best in tuberculosis. I do not call into question the efficacy of the 30th dilution; but I have certainly never had from it such convincing response, hence use it less often, and then in chronic paralytic and other affections of the spinal marrow. Phosphoric acid I gave in the lower attenuations, from the 3d to the 1st, especially in cholera, choleraic and colliquative diarrhœa. Of

*PLATINA* I have seen no prominent effects. Usually I gave it in the 3d trit. The 30th dilution I have used too little to express an opinion. With

*PLUMBUM* I have had still less success. I have prescribed it in the 3d trit., and in the 30th attenuation in paralysis and in chronic obstructions, although naturally in desperate cases.

*PRUNUS SPINOSA* formerly yielded remarkable results in three or four cases of general dropsy from cardiac disease and in abdominal dropsy, in the 1st dilution and tincture; I am sorry to say that of late the remedy, given in the same doses, failed me entirely.

*PSORICUM*, used almost wholly in the 30th dilution, has never done anything for me.

*PULSATILLA*.—This excellent remedy I use in the 2d, 6th, and 30th dilution, according to the certain clear indications. The 3d dilution I choose in gastric and digestive derangements, chlorosis, and catarrh; the 6th attenuation in headache, toothache, inflammations of eye and ear, abscess on the foot, eczema, varicosities. The 30th dilution seemed to me always to possess particular virtue in the facial acue of young girls at puberty and in chronic aural affections, hence I use it exclusively in such cases.

*RHEUM*, in the 2d or 1st dilution, and also in the tincture, has several times served me well in transient diarrhœas, when the higher attenuations had failed me.

*RHUS TOX.* I use in the 6th, 3d, 1st dilution. Of the 6th dilution I have had for years the best effects in skin-affections, especially in erysipelas, and tinea capitis; the 3d I prefer in rheumatism; the 1st in paralysis. Of the 30th attenuation I have not yet seen positive cures, but have used it only in cases in which the low attenuations accomplished nothing, while *Rhus* seemed to be well indicated.

*SAMBUCUS* has yielded me unmistakably clear results in affections of the larynx and trachea; I used it in the 1st and 2d.

*SECALE CORNUTUM*.—Here too I have only seen positive effects from the 1st and 2d dilution in hemorrhages and choleraic conditions; even the 3d and 6th seemed inert.

*SENNA* has never yielded me any clear effect in any dose.

*SEPIA* I use in the 6th and 30th attenuation; I select the 6th when there exist characteristic bilious conditions, as shown by the complexion; I prefer the 30th in chronic constipation and resulting abdominal plethora.

**SILICEA.**—I believe to have seen positive effects from Silicea in the 6th and 30th dilution. I am the less able to determine a preference for one or the other attenuation as the nature of the affections calling for Silicea is such that we cannot expect striking results. In such cases it is difficult to ascertain if the lack of prompt action is due to the nature of the malady, to the faulty selection of the remedy, or to the wrong dose. It seems to me that I have seen the best effects in hygroma patellare.

**SPÆGELIA** I used in the 3d or 6th dilution, and without thoroughly satisfactory results in affections of the heart and digestive apparatus.

**SPONGIA**, given in the 1st and 2d, has done me such great service in croup that I have never dared in this rapidly progressive disease to test the efficacy of the 30th. From the 3d and 6th I have also seen, repeatedly good results in eczema capitis.

**STANNUM** has shown in my practice positive value in cases of chronic bronchial catarrh and in phthisis mucosa (bronchorrhœa); I have used it in the 3d trit. and in the 6th dilution.

**STAPHISAGRIA** I have generally used in the 6th, less frequently in the 30th dilution, especially in eczema capitis; but I have never seen what might be called memorable effects from any preparation.

**STRAMONIUM**, in the 6th and 3d dilution, has often yielded most positive results, especially in cases of St. Vitus Dance. I have also several times used the 18th and 30th dilution with the best of success in convulsive dysphagia of children.

**STRONTIANUM** I used to prescribe often but now almost ignore it because I have never seen the slightest response from it.

**SULPHUR.**—With this remedy, in the mother-tincture, I have made a large number of brilliant cures, especially of impetigo, eczema, ulcers on the feet, hepatization of lung-tissue, so that to me the remarkable efficacy of the tincture is so well-established that I am not often tempted to give it in trituration. But there are cases in which for many years I have preferred the 30th attenuation to the tincture. They are cases in which we find no objective symptoms, or in which they are of no value, as in the exanthems, etc. Thus, for instance, I not rarely order the 30th attenuation after a cure of eczema, pruritus etc., in which I may have used the tincture of sulphur most successfully, when hypersensitiveness of the skin, itching and burning have remained or have appeared without good cause. This often occurs after a cure of itch, *i. e.*, when the acarus has been killed. Furthermore, I select the 30th when in severe acute or chronic illness after the use of various remedies there seems to be a lack of response to the influence of remedies, thus making a fatal termination possible, as in typhus, pneumonia, inflammations of the brain, etc. And in fact, I believe to have seen, several times, a remarkable improvement in such desperate cases after the use of Sulphur 30. Finally, I have at times observed very favorable effects from the same preparation in certain cases of chronic constipation, and also in cases of general scrofulosis, in which latter case I have alternated Sulphur 30 with Calcar. carb. 30 every week.

**ACID. SULPHURICUM** I only use in material doses, from the 1c. to the 6th c. dilution. From the 1st and 2d dilution I have had almost constant excellent results in appropriate cases of gastric affections, acidity, etc., and in hæmoptysis, hæmatemesis and congestions. I had hardly less success from the 3d and 6th dilution in scorbutic affections, purpura hæmorrhagica, and palpitation of the heart. Of

**THUJA** I regret my inability to report anything particularly favorable. I have only rarely had an improvement after the use of the remedy (and even then I was not sure of it), although I have prescribed it often enough in the strong tincture (both internally and locally) in the 3d, 6th, 30th, and even in the 200th attenuation. I am frank to confess that I have lost

all confidence in the remedy so far as my own success with it is concerned ; knowing the reliance placed upon it by many others, and by good observers, I very much regret this state of affairs.

**VERATRUM**, on the other hand, I have the oftener used with distinguished success in the 1st and 2d dilution in diarrhoea, cholera, and choleraic affections ; in some cases when using a heavy dose, the effect seemed instantaneous. I prefer, however, the 6th dilution in palpitation, anxiety, cramp in the calves of the legs, stomach-affections, mental derangements, etc. I have also employed, with fair success, higher (12th and 18th) attenuations in mental diseases.

**ZINCUM**, finally, has done little for me in the 3d trit, or in the 6th and 30th attenuations, although I have prescribed it by no means unfrequently in hydrocephaloid and in true encephalitis.

#### NOTES BY THE TRANSLATOR.

In view of the practical importance of this subject I cannot resist the temptation of adding to the above paper of Dr. Clotar Mueller a few propositions embodying honest convictions on my part, based upon the practical experience of more than sixteen years, during all of which time I have been sufficiently busy as a practitioner to obtain an abundance of clinical material for observation, and, usually, not so over-worked as to allow myself to drift into a mere routinist, or to become one who engages in the practice of the healing-art as in a trade rather than a learned and exalted profession. Like Mueller, than whom no more consistent homœopathist and learned man ever drew lance for truth, I offer the few suggestions carefully weighing each word, well-convinced that they deserve a certain measure of consideration, and utterly unconcerned so far as it applies to the reception by others of the statements here made :

(a.) The question of dosage is by no means as unimportant to the patient, so far as it affects the prognosis of a case, as many physicians seem inclined to maintain. If the dose is larger than necessary to produce certain desirable effects, it must disturb the vital forces ; if too small, its inefficiency is at once apparent.

(b.) It is not wise to limit the range of doses by force of habit or belief in the opinions expressed by others. Utterly unsettled as the question still remains, experience teaches that under circumstances and for reasons not yet understood, certain preparations of remedies are preferable to others in the promptness of their curative action. Whatever means may eventually be found to formulate an intelligent and scientific law of doses, the clinical experience of the individual, and collectively of the profession, is likely to prove as safe a guide as is available at present.

(c.) It is safe to assert that of the two extremes an exclusive adherence to the lower attenuations, or potencies, so-called, is the safer of the two, because the probability of giving an over-dose of medicine by administering a few drops of a low attenuation or a few grains of a low trituration is not so great as is the probability of administering, under the form of a high attenuation, a medicinal substance lacking in medicinal force, or of risking health and life of the patient upon an infinitesimal potency, so-called, which may be perfectly innocent of any medicinal potencies whatever.

(d.) The generally accepted proposition that the selection of the dose may, generally, be based upon the duration of a disease, so far as its acuteness or chronicity is concerned, possesses very little practical value. I have frequently administered with good success high attenuations in acute cases, and low attenuations in chronic cases. In fact, I can truthfully affirm that for the last ten years I have been forced by the nature of cases brought to me to devote a considerable time and study to decidedly

chronic cases, and my experience, in their treatment, with carefully selected high attenuations has been infinitely less satisfactory than with the same remedies, given upon the same indications, in more material doses.

I believe that the temperament of the patient offers a far more reliable guide in determining the dose to be employed than any other means for the same end now at our disposal.

(e.) It has been my experience, from the care of cases the nature of which permitted long-continued study and careful experimentation, that diseases affecting the nervous system, which depend upon malnutrition or faulty assimilation, and are characterized by nervous disturbances varying from a slight neurasthenia to a complete and seemingly hopeless unsettling, are more frequently cured by rest, proper food, and wisely directed psychological influences than by the administration of remedies in any potency. Of the two extremes, the very high potencies, if administered by a physician who pays due attention to regimen and to healthful personal influence over the patient, are infinitely to be preferred over the material doses of drugs, for the reason that the infinitesimals are not likely to disturb the over-sensitive nervous system by the action of a drug-force of which they are not possessed. In this class of cases, which to the practitioner present some of the most perplexing questions, drugs must be classed as auxiliaries of the third magnitude only.

(f.) In attempting to arrive at conclusions in the matter of dose, the practitioner must bear in mind that the mere fact that a remedy, to all intents and purposes, and in every sense of the word, the very *similimum*, fails to yield satisfactory results must not be considered a proof that he has failed in the selection of the proper dose. Ignoring certain vital and other conditions which might furnish the explanation for failure to cure a seemingly curable case with the *right* remedy administered in the right amount, or dose, it is well to remember :

I. \*That remedies often fail to act because they are not properly prepared, and thus cannot perform the work assigned them.

II. That remedies may be given too often or at intervals too lengthy to accomplish their mission.

III. Our method of administration is too often faulty ; hence we may thus fail.†—*Medical Counselor*, July 1, & July 15, 1885.

\* Dilutions of metallic substances ; apis, if old, does not answer ; lachesis is notoriously unreliable ; dried, old herbs.

† Apis, lachesis, etc., act best when injected hypodermically, as I have verified.

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